

Article

Educational Management Strategies for Physical Activities in Vocational Colleges under the Guidance of the "Camel Spirit": A Case Study of Endurance Training and Team Sports

Yongguang Xiao ^{1,*}¹ Graduate School University of the East, Manila, Philippines

* Correspondence: Yongguang Xiao, Graduate School University of the East, Manila, Philippines

Abstract: This study investigates the integration of the "Camel Spirit"—characterized by perseverance, endurance, and collective strength—into the educational management of physical activities in vocational colleges. Taking endurance training and team sports as core examples, the paper analyzes the alignment between spiritual values and physical education goals, identifies existing management limitations, and proposes targeted strategies guided by cultural and developmental objectives. The research highlights the value of spirit-oriented education in enhancing students' resilience, collaboration, and moral development. Furthermore, it emphasizes the importance of institutional support, teacher capacity building, and comprehensive evaluation systems to ensure the sustainability and effectiveness of such reforms. The findings offer practical insights for advancing physical education as a vehicle for holistic vocational training.

Keywords: Camel Spirit; vocational physical education; educational management; endurance training; team sports; character development

1. Introduction

1.1. Research Background and Significance

The "Camel Spirit" characterized by perseverance and resilience in enduring hardship holds profound educational value in the current era. As higher vocational colleges play an increasingly important role in cultivating skilled talents, the physical and mental development of students has become a vital part of their comprehensive quality education. However, the current situation of physical activities in vocational colleges reveals several challenges, such as insufficient student participation, weak endurance training, and a lack of team cohesion in competitive sports.

In this context, integrating the "Camel Spirit" into physical education is both feasible and necessary. By embedding the core elements of endurance, persistence, and collective strength into sports activities, colleges can better shape students' physical fitness and strengthen their willpower and team awareness, which are essential qualities for future technical and skilled workers.

1.2. Research Objectives and Content

This study aims to explore practical strategies for incorporating the "Camel Spirit" into the management of physical activities in vocational colleges. Focusing on endurance training and team sports as typical examples, the paper proposes targeted educational management approaches to enhance students' physical resilience, cultivate a spirit of perseverance, and foster teamwork. These strategies are expected to provide a reference for enriching the content and improving the effectiveness of physical education in vocational institutions.

Received: 09 July 2025

Revised: 17 July 2025

Accepted: 26 July 2025

Published: 09 August 2025



Copyright: © 2025 by the authors.
Submitted for possible open access
publication under the terms and con-
ditions of the Creative Commons At-
tribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

2. Analysis of the Compatibility Between the “Camel Spirit” and Physical Education in Vocational Colleges

2.1. Concept and Core Elements of the “Camel Spirit”

The “Camel Spirit” symbolizes perseverance, endurance, diligence, and the capacity to withstand hardship. Rooted in the image of the camel as an animal that survives harsh desert environments through patience and resilience, this spirit emphasizes unwavering determination and the ability to overcome adversity over long periods of time. It embodies the qualities of persistence in the face of difficulties, adaptability to changing and challenging circumstances, and a strong sense of collective support within a group, similar to how camels travel in caravans for safety and survival.

For students in modern vocational colleges, the “Camel Spirit” represents not only the physical strength to endure tough training but also the mental fortitude to persist through academic and professional challenges. Cultivating this spirit encourages students to embrace discipline, maintain a positive attitude when facing setbacks, and work together toward common goals. These traits are especially relevant for vocational students who are expected to enter industries that often require hard work, teamwork, and resilience in demanding environments.

Therefore, understanding and nurturing the “Camel Spirit” provides a solid cultural and value-based foundation for improving students’ physical and mental resilience through sports education [1].

2.2. The Connection Between the Connotation of Sports Spirit and the “Camel Spirit”

The spirit of sports has long been recognized as an important vehicle for cultivating essential personal and social qualities, including fairness, persistence, self-discipline, and cooperation. It encourages individuals to push beyond their limits, face challenges head-on, and continuously strive for personal and collective excellence.

There is a natural alignment between the core values of sports spirit and the “Camel Spirit”. Both emphasize enduring difficulties and setbacks with tenacity and a positive mindset. While the sports spirit focuses on fair play, respect for rules, and the pursuit of victory through effort and skill, the “Camel Spirit” highlights the same qualities in the broader context of enduring hardships and supporting each other to achieve a common goal [2].

In practical terms, this compatibility is reflected in physical activities that require sustained endurance, such as long-distance running, as well as in team-based sports that rely on unity, mutual trust, and collective effort. By integrating the “Camel Spirit” into sports training and competition, vocational colleges can strengthen the educational function of physical education, transforming sports activities into effective platforms for character building, team cohesion, and the cultivation of a resilient mindset. Table 1 provides a comparison of these shared core elements to clearly illustrate their alignment.

Table 1. shows the parallels between the “Camel Spirit” and core sports values.

Core Element	“Camel Spirit”	Sports Spirit
Perseverance	Endurance in harsh conditions	Persistence in training and competition
Resilience	Ability to withstand setbacks	Overcoming difficulties and failures
Collective Cooperation	Herd behavior and mutual support	Teamwork and fair play
Adaptability	Survival in changing environments	Flexibility in tactics and teamwork

2.3. The Value of the “Camel Spirit” in the Educational Function of Physical Education in Vocational Colleges

Physical education in vocational colleges serves not only to improve students’ physical health but also plays a crucial role in shaping their character, cultivating resilience, and fostering teamwork and social responsibility. The integration of the “Camel Spirit” into this educational framework enhances these functions by providing a clear cultural and value-oriented guide.

By embedding the qualities of perseverance, endurance, and collective cooperation into sports activities, students are encouraged to develop stronger willpower and a proactive attitude toward challenges, both in their studies and future careers. Moreover, the emphasis on mutual support and collaboration reflects the demands of modern workplaces, where teamwork and adaptability are essential [3].

Thus, promoting the “Camel Spirit” through physical education contributes to nurturing well-rounded vocational talents who are not only skilled in their professions but also possess the mental toughness and cooperative spirit necessary for sustainable personal and professional development.

3. Management Challenges under the “Camel Spirit”

3.1. Current Participation in Physical Activities

Due to time constraints and limited access to large-scale survey data, this study did not conduct a comprehensive survey. Instead, it combines secondary data from previous research with informal interviews conducted with physical education teachers and class advisors in vocational colleges. The general participation rates for endurance training, team sports, and other activities are adapted from existing literature on physical activity patterns among Chinese vocational college students. These estimates were further refined through discussions with frontline PE instructors in order to more accurately reflect the actual situation on campus. Therefore, the statistics presented in Figure 1 are intended to illustrate general trends rather than precise national averages.

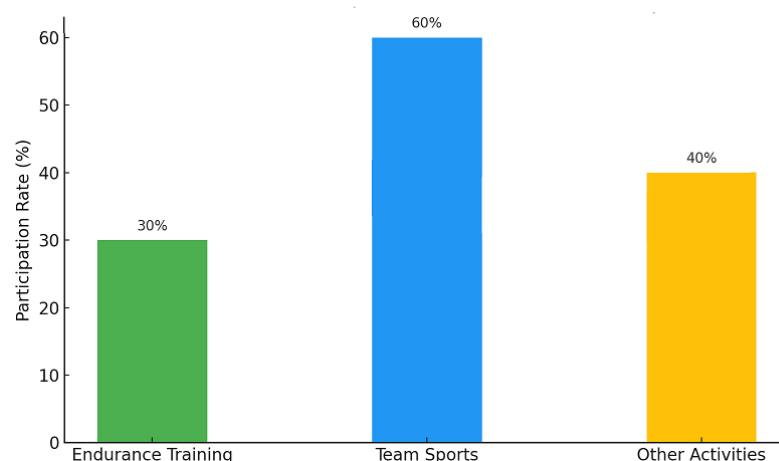


Figure 1. Statistics on the Current Participation of Vocational College Students in Physical Activities (based on published reports and teacher interviews, Spring 2025).

Physical activity participation among vocational college students varies significantly across different types of sports. According to the combined findings, a considerable proportion of students show relatively low engagement in endurance training, while team sports tend to attract more participants due to their social and competitive nature. However, team sports activities are often limited by ineffective organization and insufficient planning, which reduce their potential educational impact.

As shown in Figure 1, the distribution of student participation clearly highlights this imbalance. Although team sports have a higher participation rate, endurance training remains less popular and requires more focused attention in terms of curriculum design and student motivation.

This uneven participation poses challenges to both the comprehensive development of students' physical fitness and the cultivation of perseverance and teamwork, which are core qualities emphasized by the "Camel Spirit". Therefore, targeted educational management strategies are necessary to address these gaps.

3.2. Characteristics and Problems of the Existing Management Model

Although vocational colleges have established certain institutional frameworks for managing physical activities, several limitations hinder the integration of the "Camel Spirit" into daily practice. The following analysis identifies the characteristics and core problems of the current management model, particularly in relation to endurance and team-based activities [4].

3.2.1. Emphasis on Routine Management, Lack of Value-Based Guidance

Current physical education management tends to focus on routine operations such as class attendance, equipment use, and behavioral regulation. While these aspects ensure basic order, they rarely incorporate ideological or value-driven components that align with the "Camel Spirit" such as perseverance, endurance, and mutual support. As a result, the deeper educational potential of sports activities remains underdeveloped.

3.2.2. Monotonous Organization of Activities, Limited Differentiation

Due to its low popularity and perceived difficulty, endurance training is frequently marginalized as sports programs often rely on a limited set of activities. Team sports, while more widely adopted, are frequently implemented without variation or progression, leading to a lack of engagement and challenge. This restricts students' opportunities to experience physical and mental trials that embody the "Camel Spirit".

3.2.3. Traditional Teaching and Management Approaches

Many PE teachers face high workloads and rely on conventional teaching methods centered on technical drills and compliance. There is often insufficient emphasis on psychological motivation, character development, or the use of inspirational narratives that could help students internalize the values of resilience and cooperation. Especially during endurance training, students may lack the necessary motivation to overcome physical discomfort and develop lasting perseverance.

These characteristics indicate that while physical activity management is present in form, it lacks in substance when it comes to shaping character and promoting spirit-led development. This gap presents both a challenge and an opportunity for reform.

3.3. Main Problems and Future Directions

Based on the analysis above, the current management of physical activities in vocational colleges, while structurally sound in some aspects, fails to fully leverage its educational potential in shaping students' endurance, resilience, and teamwork—core attributes of the "Camel Spirit". The following are the main problems identified, along with proposed future directions.

3.3.1. Problem: Lack of Spirit-Oriented Educational Goals

Most physical education programs emphasize physical performance and compliance, but rarely set clear educational goals related to cultivating perseverance or mental toughness. The absence of explicit value-based targets makes it difficult to embed the "Camel Spirit" meaningfully into the curriculum.

Recommendation: Future management should set educational outcomes that highlight character development, especially in endurance and team-based training. By aligning training objectives with the qualities of the “Camel Spirit”, schools can reinforce the dual function of sports—physical improvement and personal growth.

3.3.2. Problem: Insufficient Activity Innovation and Progression

Current sports activities lack structural differentiation and developmental staging. Many students experience repeated, stagnant training formats without a sense of challenge or personal progression, limiting opportunities to develop a resilient mindset through physical hardship.

Direction: It is necessary to introduce level-based and progressively challenging sports modules—especially in endurance sports—to simulate the long-term difficulty and perseverance reflected in the “Camel Spirit”. Structured progression can help students gradually strengthen both their bodies and mental endurance.

3.3.3. Problem: Weak Integration of Teacher Guidance and Motivation

Teachers often focus on instruction and discipline, but overlook motivational techniques, such as emotional encouragement and storytelling that reinforce values like determination and unity. This leads to a mechanical sports experience rather than one with emotional resonance.

Proposed Solution: Teachers should receive training in value-oriented guidance strategies, learning how to integrate the “Camel Spirit” into daily instruction through examples, reflection activities, and team-based encouragement. Incentive mechanisms that reward teachers for integrating value-oriented guidance can further promote sustained implementation.

4. Educational Management Strategies Guided by the “Camel Spirit”

4.1. Educational Management Strategies for Endurance Training

In vocational college physical education, endurance training is central to embodying the core values of the “Camel Spirit”. It not only challenges students physically but also cultivates perseverance, focus, and long-term dedication. A tailored management strategy for endurance training is essential for achieving the value-oriented goals of physical education. The following strategies are proposed:

1) Scientific Training Design: Phased Objectives and Tiered Implementation

A well-structured training system should establish clear, progressive objectives according to students’ physical condition and baseline endurance levels. Training can be divided into four stages: adaptation, challenge, improvement, and consolidation. This phased design enhances students’ confidence and reduces the risk of fatigue or injury. Furthermore, differentiated training plans should be created based on individual student profiles to ensure balanced physical and mental development. Scientific planning improves the sustainability and effectiveness of endurance programs [5].

2) Cultural Guidance and Spirit Integration: Thematic Education and Exemplary Narratives

The essence of the “Camel Spirit”—resilience, silent dedication, and unwavering persistence—should be transformed into emotionally resonant educational content. Thematic activities, such as “The Power of Persistence” or “Marching Toward the Horizon”, can be integrated into physical training. Through storytelling and case studies of athletes, dedicated workers, or exemplary peers, students develop emotional connections with the values of the spirit. This internal motivation strengthens their willingness to engage with endurance tasks over time (Figure 2).

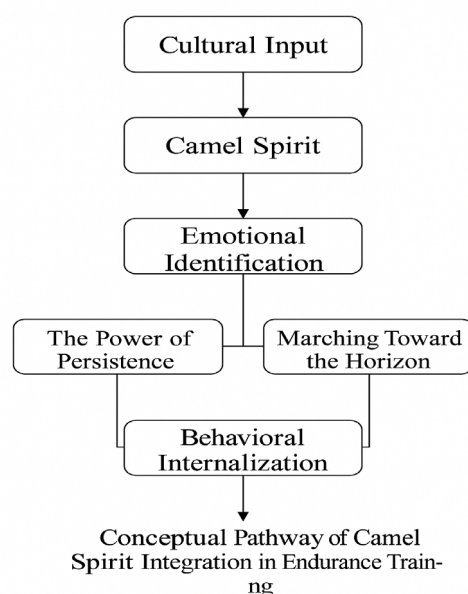


Figure 2. Conceptual Pathway of Camel Spirit Integration in Endurance Training.

3) Process-Based Management and Incentive Evaluation: Staged Assessment and Role Modeling

Effective endurance training programs require systematic process management. Instructors should conduct regular assessments, such as fitness tests or resilience tasks, aligned with phased goals. Performance tracking and timely feedback can boost students' self-awareness and strengthen their intrinsic motivation. Additionally, a recognition mechanism should be implemented to highlight students who demonstrate exemplary perseverance, cooperation, or moral integrity during training. Such practices foster a positive, competitive, and value-oriented team environment.

4.2. Educational Management Strategies for Team Sports

Team sports serve as an ideal platform for cultivating collective cooperation, mutual support, and shared perseverance—qualities deeply aligned with the “Camel Spirit”. By enhancing the management strategies of team-based physical activities, vocational colleges can promote students' emotional cohesion, communication skills, and a collective sense of purpose. Two primary strategies are proposed:

1) Shaping Team Consciousness: Group-Based and Captain-Based Models

To embed team values into the sports experience, colleges should adopt group-based structures where students are consistently assigned to fixed teams throughout a training cycle. This long-term group stability fosters mutual trust, accountability, and collaboration. Furthermore, implementing a captain system—where each group elects a team leader—can encourage leadership development and distributed responsibility. Captains can coordinate training tasks, inspire their peers, and act as role models of endurance and unity, thus reinforcing the collective spirit central to the “Camel Spirit”.

2) Innovating Competitive Mechanisms: Intra-College Leagues and Themed Tournaments

Beyond standard training, innovative competition formats can increase engagement and strengthen team-based values. Colleges are encouraged to organize intra-college leagues that span across departments or majors, ensuring continuous engagement and opportunities for inter-group learning. In addition, themed tournaments—such as “Persistence Cup” or “Unity Relay”—can integrate symbolic meanings into the competitive

format, transforming matches into spiritual and educational experiences. These approaches not only enhance competitive intensity but also offer concrete opportunities for students to embody and internalize the values of the “Camel Spirit” [6].

3) Combining Teacher Guidance with Student Self-Management: Co-Construction and Autonomy

A balanced approach that combines teacher-led guidance with student-centered autonomy is essential for sustaining motivation and fostering a sense of ownership in team sports. Instructors should provide structural support, clarify team roles, and model the values of discipline and cooperation rooted in the “Camel Spirit”. At the same time, students should be empowered to take responsibility for team planning, internal communication, and peer evaluations [7].

Establishing student management committees within teams—responsible for organizing practice schedules, resolving conflicts, and maintaining morale—can significantly increase engagement and accountability. Regular collaborative meetings between teachers and students can help align educational goals with team dynamics. This shared governance model not only enhances organizational efficiency but, through collaborative engagement, also fosters mutual trust, collective problem-solving, and deeper internalization of the “Camel Spirit”.

5. Implementation Support and Supporting Measures

The successful integration of the “Camel Spirit” into the educational management of physical activities requires not only well-designed strategies but also strong institutional and personnel support. Without systematic implementation mechanisms and a capable team, the value-oriented training framework may remain at the conceptual level. This chapter outlines key supportive measures to ensure the effective implementation of previous strategies.

5.1. Institutional Support: Regulations and Assessment Mechanisms

To operationalize spirit-guided management strategies, vocational colleges must establish or revise internal regulations that reflect the values and objectives of the “Camel Spirit”. These may include detailed management guidelines for endurance training, structured team management, and character-oriented assessment standards [8].

A comprehensive evaluation system should be developed to assess not only physical performance but also students’ engagement, persistence, teamwork, and attitude during training. Such multidimensional assessment tools can redirect attention from immediate performance outcomes to long-term personal development. Moreover, clearly defined responsibilities among administrators, PE instructors, and student leaders are essential for ensuring transparency and accountability.

5.2. Faculty Development: Teacher Training and Talent Recruitment

The role of instructors is pivotal in guiding students to internalize the “Camel Spirit”. Colleges should invest in professional development programs that train PE teachers to incorporate core values into their teaching pedagogy, psychological motivation techniques, and adaptive training design. Training sessions may include workshops on character-building, case study analysis, and interdisciplinary approaches that connect physical education with moral and cultural instruction.

In parallel, institutions should actively recruit professionals with backgrounds in endurance sports psychology, team coaching, or moral education to enrich the teaching force. These specialists can serve not only as instructors but also as mentors and consultants in value-driven program design, helping bridge the gap between physical practice and value cultivation [9].

5.3. Facility and Funding Support: Infrastructure and Special Budget Allocation

Physical activities that promote endurance, teamwork, and character development require adequate environmental and material support. Without proper infrastructure and sustained funding, even well-conceived management strategies may not achieve the desired outcomes [10].

First, colleges should upgrade and maintain sports facilities to ensure safety, functionality, and diversity. Endurance tracks, strength training zones, and modular team-sport fields should be designed or improved to support progressive training goals and multi-level participation. Facilities that meet professional standards also enhance students' sense of commitment and engagement.

Second, there must be dedicated funding to support the implementation of spirit-oriented programs. This includes financial support for teacher training, competition organization, reward systems, and cultural integration activities. Establishing a special budget for "Camel Spirit" programs signals institutional commitment and enables continuous innovation.

Figure 3 conceptually outlines the recommended allocation of institutional resources, highlighting the priority areas for implementing the "Camel Spirit" in vocational physical education. By visualizing a proportional investment model across facility enhancement, faculty training, and program operation, it supports a holistic approach to program development. The percentages shown are symbolic and not based on actual budget data.

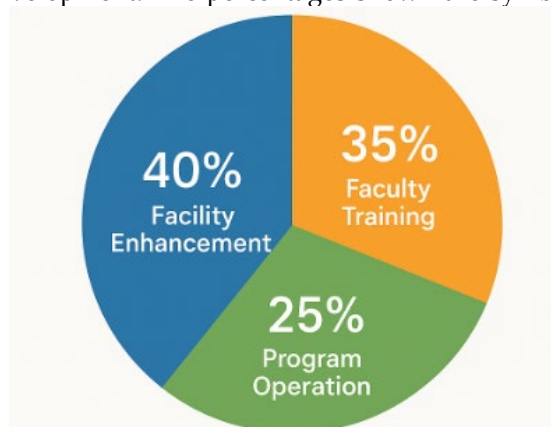


Figure 3. Illustration of Investment Structure in Support Measures.

These infrastructural and financial commitments form the foundation for long-term, scalable, and impactful implementation of the "Camel Spirit" framework in vocational college physical education.

5.4. Comprehensive Evaluation System: Process- and Outcome-Based Assessment

A robust and practical evaluation system is essential to ensure that the "Camel Spirit" is not only advocated in theory but also implemented and reflected in students' daily performance. The assessment framework should adopt a multi-dimensional approach that combines both formative (process-based) and summative (outcome-based) components.

In addition to measuring physical fitness indicators such as endurance levels, strength, and technical proficiency, the system should evaluate students' behavioral qualities, including perseverance, cooperation, responsibility, and resilience demonstrated during training and competitions. Such multi-layered criteria encourage students to focus on self-discipline, persistence, and continuous improvement throughout the learning process rather than focusing solely on final results [11].

Moreover, this comprehensive evaluation framework can provide actionable feedback for instructors and students, forming a closed loop of goal-setting, monitoring, adjustment, and recognition.

To ensure that the “Camel Spirit” is systematically cultivated through physical activities, this study proposes an integrated evaluation form that combines both physical fitness and character-building dimensions. The design of this evaluation emphasizes endurance and strength as the foundation of physical education, while also giving significant weight to behavioral qualities such as perseverance, teamwork, and responsibility. The score allocation reflects the intended balance between measurable athletic performance and value-oriented personal development, as illustrated in Table 2 below.

Table 2. Integrated Evaluation Form for Students’ Physical Fitness and “Camel Spirit” Qualities.

Evaluation Dimension	Specific Indicator	Description	Score (Points)
Physical Fitness	Endurance Level	Long-distance running performance, stamina tests	30
	Strength and Technical Proficiency	Performance in strength exercises and basic skills	25
	Perseverance	Consistency and effort in training sessions	15
Behavioral Qualities	Teamwork and Cooperation	Active support of peers, effective group participation	15
	Responsibility and Discipline	Punctuality, compliance with training requirements	15
Total			100

By adopting this comprehensive evaluation structure, instructors can better monitor students’ progress, foster balanced development, and motivate learners to internalize the key qualities of the “Camel Spirit”. Such a system also provides clear and fair standards for formative and summative assessments, supporting both instructional improvement and students’ self-directed growth.

6. Conclusion and Future Prospects

This study systematically explored how the integration of the “Camel Spirit”—embodying perseverance, resilience, and collective strength—can enhance the educational value of physical activities in vocational colleges. Through theoretical analysis and practical strategy development, the research highlights that endurance training and team sports are not only key platforms for improving students’ physical fitness, but also powerful vehicles for cultivating mental toughness, cooperative awareness, and long-term goal orientation.

The findings emphasize that embedding the “Camel Spirit” into the educational management of physical education requires a coordinated effort across curriculum design, teacher guidance, cultural integration, and institutional support. Specific strategies—such as phased endurance training, thematic competitions, captain-led teams, and value-oriented evaluation systems—have shown strong compatibility with the developmental needs of vocational students. When properly implemented, these strategies contribute to forming not just skilled workers, but well-rounded individuals who can withstand challenges and thrive in demanding environments.

Furthermore, the study underscores that educational transformation is not solely reliant on pedagogical innovation, but also on stable institutional guarantees. Enhancing teacher training, allocating targeted resources, and constructing comprehensive assessment systems are all essential components for ensuring the long-term success of spirit-oriented physical education reforms.

Looking ahead, future research may expand on this framework by incorporating empirical studies, cross-institutional comparisons, and interdisciplinary approaches. There

is also room to explore how the “Camel Spirit” can be applied to other domains of vocational education, such as entrepreneurship, community engagement, or professional ethics, to support a more holistic model of talent development.

Ultimately, the “Camel Spirit” offers not only a cultural metaphor but also a meaningful framework for fostering the moral and physical development of vocational students in the modern era.

References

1. W. Zeng, "Reform curriculum to highlight the character of higher vocational college PE," in *Proc. 3rd Int. Conf. Sci. Social Res. (ICSSR)*, 2014, pp. 261–265, doi: 10.2991/icssr-14.2014.64.
2. T. Yu, H. Shen, and H. Li, "The historical evolution and contemporary value of craftsmanship spirit in vocational college," in *Proc. 6th Int. Conf. Econ., Manage., Law Educ. (EMLE)*, 2021, pp. 575–580, doi: 10.2991/aebmr.k.210210.093.
3. J. Jiang and C. Wu, "Research on the cultivation path of the integration of craftsman spirit and professional skills," *SHS Web Conf.*, vol. 157, p. 03013, 2023, doi: 10.1051/shsconf/202315703013.
4. A. Okilanda et al., "Endurance training and its impact on physical health among university students," *Retos: Nuevas Tend. Educ. Fis., Deporte Recreación*, no. 59, pp. 1092–1102, 2024, doi: 10.47197/retos.v59.107516.
5. Ø. Sandbakk et al., "Best-practice training characteristics within Olympic endurance sports as described by Norwegian world-class coaches," *Sports Med.–Open*, vol. 11, no. 1, art. no. 45, 2025, doi: 10.1186/s40798-025-00848-3.
6. B. P. Dyson, R. Colby, and M. Barratt, "The co-construction of cooperative learning in physical education with elementary classroom teachers," *J. Teach. Phys. Educ.*, vol. 35, no. 4, pp. 370–380, 2016, doi: 10.1123/jtpe.2016-0119.
7. L. Yang, "The Evolution of Ballet Pedagogy: A Study of Traditional and Contemporary Approaches," *J. Lit. Arts Res.*, vol. 2, no. 2, pp. 1–10, Apr. 2025, doi: 10.71222/2nw5qw82.
8. P. A. Hastie, "Sport pedagogy research and its contribution to the rediscovery of joyful participation in physical education," *Kinesiol. Rev.*, vol. 12, no. 1, pp. 28–35, 2023, doi: 10.1123/kr.2022-0030.
9. S. Zhang and X. Li, "Research on the path of promoting the development of students' professional quality through physical education teaching in higher vocational colleges," *unpublished manuscript*, 2025, doi: [https://doi.org/10.53469/jsshl.2024.07\(06\).16](https://doi.org/10.53469/jsshl.2024.07(06).16).
10. W. Chen and C. D. Ennis, "Goals, interests, and learning in physical education," *J. Educ. Res.*, 2004, doi: 10.3200/JOER.97.6.329-339.
11. R. Bailey et al., "The educational benefits claimed for physical education and school sport: An academic review," *Res. Pap. Educ.*, 2009, doi: 10.1080/02671520701809817.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of GBP and/or the editor(s). GBP and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.