

Research on the Strategy of Integrating Physical Fitness Training in Middle School Physical Education Teaching

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Abstract: To explore the implementation path of the deep integration of middle school physical education teaching and physical fitness training, and improve the physical health level and core literacy of adolescents, this study analyzes the important value of physical fitness training integration in enhancing students' physical quality, cultivating willpower, and promoting the coordinated development of body and mind. Relying on strategies such as strengthening students' cognitive motivation for physical fitness training, constructing a structured curriculum system with in-class and out-of-class linkages, developing a fun training model combining gamification and competition, and implementing a dynamic hierarchical evaluation mechanism, it is possible to solve the dilemma of the separation between physical fitness training and skill teaching, and promote the coordinated development of middle school students' motor abilities and healthy behaviors.

Keywords: Middle school physical education teaching; Physical fitness training; Physical quality

With the development of the Healthy China strategy, physical fitness training in middle school physical education still faces many challenges. In some schools, there is a disconnection between physical fitness training and motor skill teaching, with fragmented and repetitive training content and single and boring teaching methods, resulting in low student interest and limited exercise effects. Some teachers mainly emphasize technical movement training while neglecting the cultivation of physical fitness foundations. Coupled with the lack of targeted evaluation methods, it is difficult to meet the growth needs of students with different physical constitutions. With the implementation of the concept of physical education core literacy, naturally integrating physical fitness training into classroom teaching has become a key point of reform^[1]. This study proposes operable implementation strategies to promote the improvement of students' physical fitness and mental health development, providing a reference for school physical education reform.

1. The Important Significance of Integrating Physical Fitness Training in Middle School Physical Education Teaching

1.1 Contributing to Cultivating Adolescents' Good Physical Quality

The promotion of physical fitness training integration in middle school physical education teaching on adolescents' physical quality is reflected in the combination of targeted training and scientific design. Teachers integrate basic physical fitness elements such as strength, endurance, flexibility, and agility into daily teaching, forming a gradual ability improvement path, allowing students to simultaneously strengthen muscle strength, improve cardiopulmonary function, and develop coordination during skill learning in sports such as basketball, track and field, and gymnastics. Structured curriculum design can break the traditional single training model and adopt innovative forms such as combined movement exercises and circuit training, which can avoid excessive fatigue of local muscles and achieve balanced development of overall physical quality. Teachers can adjust the training intensity according to the characteristics of 青少年 (adolescents') bone growth and hormone secretion, reduce the risk of sports injuries through standardized movement guidance, and mobilize students' participation enthusiasm through interesting carriers such as sports games and team competitions. The deep integration of physical fitness training and special skill teaching enables students to naturally improve explosive power and agility while mastering motor skills, and the in-class and out-of-class linked training arrangements can ensure the continuity of exercise^[2].

1.2 Contributing to Cultivating Adolescents' Good Willpower

The cultivation of adolescents' willpower through physical fitness training integration runs through the entire process of daily training. In the scientifically designed training system, students can achieve phased physical fitness challenge goals, such as continuously breaking personal endurance records and completing high-intensity circuit training through team collaboration, gradually tempering the spirit of perseverance. Teachers integrate the cultivation of willpower into training links, such as setting psychological motivation nodes in long-distance running practice to guide students to learn to adjust breathing rhythms and maintain concentration when physically fatigued; adding simulated sudden situations in obstacle running and other projects to cultivate students' rapid decision-making and stress resistance. Group cooperative training requires members to supervise each other and jointly formulate training plans, strengthening a sense of responsibility and team cohesion. The dynamic evaluation system focuses on individual progress rather than horizontal comparison, and through visual growth files, students can intuitively see the "changes brought by persistent training," thereby building confidence in actively coping with difficulties.

1.3 Conducive to Achieving the Goal of Promoting Students' Coordinated Development of Body and Mind

Physical fitness training integration promotes the coordinated development of students' body and mind through physical practice and psychological construction. In the structured curriculum, strength training and coordination exercises not only enhance students' musculoskeletal system functions but also improve the brain's control over the body through the refined regulation of motor nerves; during the process of improving cardiopulmonary function through endurance training, students can establish a sense of stress management by adjusting breathing rhythms and breaking through fatigue thresholds. Teachers integrate psychological guidance into the design of physical fitness activities. For example, setting team goal challenges in rope skipping competitions allows students to cultivate the spirit of collective collaboration while improving explosive power; adding attention-focused tasks during balance training simultaneously strengthens physical stability and psychological anti-interference ability^[3]. The dynamic hierarchical evaluation system helps students establish a positive self-cognition by setting personalized progress ladders and gaining a sense of accomplishment from physical fitness improvement. Interesting training projects link physical exercise with pleasant emotions through the dopamine secretion mechanism.

2. Innovative Strategies for Integrating Physical Fitness Training in Middle School Physical Education Teaching

2.1 Improving Cognitive Levels and Stimulating Middle School Students' Motivation for Physical Fitness Training

In traditional physical education teaching, students may passively participate due to vague recognition of the value of physical fitness training, restricting the sustainability of physical education training effects. Innovative strategies can 切入 (cut in) from two aspects: cognitive reconstruction and motivation stimulation. First, schools can offer micro-classes on physical fitness knowledge, using sports physiology animation demonstrations and visual analysis of physical fitness test data to help students understand the positive correlation between cardiopulmonary endurance and learning efficiency, as well as the preventive role of core strength in sports injuries, thereby establishing a scientific training concept. Second, schools can create sports challenge and level-breaking scenarios, using smart bracelets to provide real-time feedback on data such as heart rate changes and calorie consumption, allowing students to intuitively experience the sense of body control brought by physical fitness improvement in somatosensory games. For example, teachers can design shuttle runs as energy supply competitions and plank supports as castle defense battles. Third, schools can implement growth-oriented goal management, guiding students to formulate personalized advanced plans based on physical fitness monitoring reports and adopt a sports check-in points redemption system, such as unlocking new skill learning qualifications after completing two consecutive weeks of training, to strengthen internal motivation through instant feedback.

2.2 Optimizing the Curriculum Structure and Constructing an In-Class and Out-of-Class Linked Training System

To solve the problem of the disconnection between in-class training and out-of-class exercise in middle school physical education classes, which leads to the lack of continuity in students' physical fitness development, constructing an in-class and out-of-class linked training system can extend the teaching scene from a time-space dimension. First, teachers can implement a modular curriculum design of in-class basics + out-of-class expansion in physical education classes, embedding targeted physical fitness training modules in classroom skill teaching and developing supporting family version training video resources to guide students to use fragmented

time for bodyweight exercises. Second, schools can build a digital management platform where teachers can use sports apps to issue hierarchical out-of-class tasks (such as a weekly skipping rope challenge for cardiopulmonary endurance) and synchronize students' in-class and out-of-class training data in real time, based on which teachers can dynamically adjust classroom training intensity. Third, schools can establish a three-dimensional linkage mechanism of school guidance + family supervision + community support, jointly sign physical fitness development commitment letters with parents, and carry out weekend physical fitness training camps through community sports venues to form an educational joint force. Through goal connection, content complementarity, and resource sharing, the structured curriculum system can extend physical fitness training from the 40-minute classroom to all-day life scenarios, ensuring the improvement of training frequency and quality.

2.3 Innovating Teaching Methods and Developing Interesting Physical Fitness Training Activities

To strengthen students' participation in sports and improve the quality of physical education training, teachers need to innovate teaching methods and develop interesting physical fitness training activities. First, teachers can design situational training tasks in physical education teaching, transforming basic physical fitness projects into role-playing games. For example, setting shuttle runs as firefighter rescue missions, requiring students to complete specified distance sprints while carrying heavy objects; transforming core strength training into animal imitations, activating multiple muscle groups by imitating bear crawls, crab walks, and other movements. Second, schools can innovate intelligent interactive projects, using AR technology to create virtual sports scenarios, such as projection-sensing agile ladder training, where students need to move quickly according to ground light spot changes, with real-time feedback on reaction speed and action accuracy. Third, teachers can regularly organize themed competition activities, carry out campus physical fitness Guinness challenges, set personalized challenge projects, allow students to independently apply for challenge records, and issue electronic medals. Relying on the three mechanisms of immersive experience, instant feedback, and achievement motivation, teaching innovation transforms basic quality training such as strength and endurance into an attractive exploration process, which can not only ensure that training intensity meets standards but also stimulate students' behavioral transformation from passive completion to active breakthrough.

3. Conclusion

The exploration of integrating physical fitness training in middle school physical education teaching fully reveals the role and value of physical education in the all-round development of adolescents. Relying on the systematic integration of physical fitness elements and motor skill teaching, it can not only construct a scientific development path for physical qualities such as strength and endurance but also forge tenacity, responsibility, and other will qualities through continuous challenges and team collaboration, achieving the organic unity of physical and mental growth. The proposed innovative strategies transform physical fitness training from mechanical repetition into a growth journey full of a sense of accomplishment, allowing students to experience the joy of self-breakthrough in sweating, and providing an operation model for the implementation of the "health first" education concept. The reform with physical education as the carrier and education as the core not only responds to the urgent needs of high-quality development of school physical education in the new era but also opens up an innovative path for cultivating lifelong exercisers and active life practitioners.

References:

- [1] Wang Zhaojing, Wen Jiahua. Research on the Strategy of Integrating Physical Fitness Training in Middle School Physical Education Teaching [J]. Education Art, 2023, (05): 46.
- [2] Chen Jianhua. Research on the Strategy of Integrating Physical Fitness Training in Middle School Physical Education Teaching [J]. Teacher, 2023, (03): 63-65.
- [3] Guo Gengyang, Peng Jinzhou. Research on the Strategy of Integrating Physical Fitness Training in Middle School Physical Education Teaching [J]. Teacher Education Forum, 2021, 34 (06): 62-63.