

Research on the Strategies of Construction and Utilization of School Sports Facilities in the Context of a Strong Sports Nation

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Abstract: Building a strong sports nation is the goal and task of reforming and developing China's sports work in the new era. With the continuous advancement of China's education reform, the education sector has paid more attention to sports. Schools are the cradle for cultivating future pillars, especially school sports facilities, which are important carriers for cultivating students' healthy bodies and shaping a good lifestyle. Their construction and management are of irreplaceable importance for achieving the goal of national fitness and promoting social harmony and stability. Therefore, in this context, the discussion and analysis of the current status and development path of school sports facilities in the construction of a strong sports nation can fully improve China's school education in the new era, and at the same time contribute to the long-term development of China's sports industry.

Keywords: Sports power; School sports facilities; High school sports

Online publication: February 7, 2025

1. Related concepts

1.1. A strong sports nation

A sports power refers to a state in which a country has made outstanding achievements in the field of sports and sports occupy an important position in the country's overall development strategy. This concept not only emphasizes the country's outstanding performance in international sports events but also includes the widespread popularization and popularization of sports culture in the country. The realization of a sports power requires the comprehensive promotion of the development of sports, including the construction of basic sports facilities, the cultivation of sports talents, sports scientific research and innovation, etc. Under the strategy of becoming a sports power, the country usually increases policy support and investment in sports and carries out national fitness activities to improve the physical fitness of the people, the national

image, and the overall national strength ^[1].

1.2. School sports facilities

School sports facilities refer to the venues and equipment necessary for students to exercise, compete in sports, and teach physical education. These facilities include sports fields, gymnasiums, swimming pools, etc. Their main purpose is to comprehensively encourage students to exercise and cultivate their interest in sports. The quality and quantity of school sports facilities are directly related to the quality of students' sports activities and are of great significance for cultivating students' physical fitness, teamwork ability, and healthy living habits. Under the strategy of building a strong sports nation, the construction of school sports facilities will become a key link, directly affecting the cultivation of future sports talents and the improvement of the country's overall sports level ^[2].

2. Analysis of the current situation of school sports facilities construction

2.1. Some of the school's sports equipment is monotonous and old

Inadequate and aging facilities pose a significant barrier to the provision of quality physical education. Many schools across the country struggle with outdated and dilapidated infrastructure, including dilapidated playing fields, outdated gymnasiums, and inadequate equipment. These substandard facilities not only put students' safety at risk but also limit the range of sports activities that can be offered.

In most schools, sports facilities are mainly ball sports equipment, such as basketball hoops and football goals. This single layout of sports facilities limits the diversity and innovation of sports teaching content. For example, the lack of professional facilities required for track and field, swimming, gymnastics, and other projects means that school physical education is often limited to the most common and easiest to organize ball games. This situation is not conducive to the comprehensive development of students' physical fitness, nor is it conducive to cultivating students' interests and hobbies in various sports activities. In addition, due to limited resources, schools often give priority to projects that are more universal and easier to popularize, resulting in some special sports projects and facilities being neglected ^[3].

2.2. Irrational planning of school sports facilities

Lack of proper planning and space allocation for sports facilities in schools leads to cramped or poorly designed sports areas. This not only affects the quality of physical education teaching but also reduces the overall experience of students participating in sports activities. Additionally, the lack of multi-purpose spaces limits the versatility of facilities and hinders their ability to accommodate a variety of sports and recreational activities.

2.3. There is a big difference in sports facilities between urban and rural schools

The difference in sports facilities between regions is also an issue that cannot be ignored, especially the gap between rural and urban areas. In many rural schools, due to funding and geographical limitations, there is a lack of suitable indoor sports venues. This means that in bad weather conditions, there is little space for students to engage in physical exercise. For example, some schools in mountainous areas or remote rural

areas lack sufficient financial and technical support to build and maintain indoor sports facilities due to their remote geographical location. This not only affects the frequency and quality of students' physical exercise but also limits the diversity of physical education teaching content. In contrast,

Schools in urban areas usually have more complete and modern sports facilities, such as standard indoor basketball courts, badminton halls, etc., which to some extent exacerbates the inequality in sports education resources between urban and rural areas.

2.4. Lack of professional teachers and low utilization of sports facilities

The effective use of sports facilities depends not only on the facilities themselves but also on the availability of professional instructors. Currently, many schools are facing a shortage of professional physical education teachers, which directly affects the quality of physical education courses and the full utilization of facilities. In addition, professional teachers are not only able to teach skills, but also provide important guidance on safety, especially when using some special equipment. The lack of such professional guidance may increase the risk of students being injured during sports activities. Low facility utilization means that resources are seriously underutilized and opportunities to promote student physical activity are missed. This low utilization rate not only wastes valuable resources but also misses the opportunity for students to promote a healthy lifestyle and alleviate the problem of sedentary behavior.

2.5. Physical education focuses on theory rather than practice

In some schools, the setting of physical education courses is often formalistic, focusing on theoretical teaching and neglecting practical operations. This results in that even if the school has good sports facilities, they cannot fully play their role. In short, this lack of professional instructors limits the effective use of school sports facilities, reduces the overall effect of physical education teaching, and also affects students' participation and interest in sports activities. To solve this problem, it is necessary to start with improving the professional level and number of physical education teachers, and at the same time improve the design of physical education courses so that they pay more attention to practice and the all-round development of students.

3. Optimization strategies and suggestions

3.1. Strengthen policy support and financial investment

To address the slow pace of updating school sports facilities and the outdated nature of some equipment, policy support and funding mechanisms must be strengthened. This involves improving existing policies and regulations while allocating more financial resources to support the development and maintenance of school sports infrastructure. This requires a multifaceted approach, including government funding and partnerships with the private sector. Governments at the national, regional, and local levels should commit to allocating a larger proportion of their budgets to supporting the construction, renovation, and maintenance of school sports facilities. This can be achieved through dedicated funds specifically for sports infrastructure projects or through incentive programs that encourage schools to prioritize the development of sports facilities.

3.2. Scientific planning and design of sports venues

First, scientific planning of the layout of sports facilities requires careful assessment of the size and requirements of the school to determine the best configuration of sports venues. This includes considering factors such as student population, available space, and budget constraints to develop a layout that is both practical and efficient.

Secondly, improving the versatility of sports venues is essential to maximizing their utility and making the most of site resources. This involves designing facilities that can accommodate a variety of sports and activities, thereby minimizing the need for separate venues for each sport. In addition, by improving the versatility of venues and making the most of site resources, planners can maximize the utility and sustainability of school sports facilities, ensuring that they remain a valuable asset to schools for years to come.

Finally, school sports facilities should cover a variety of sports types to meet the interests and needs of different students. In terms of professional facility construction, schools should ensure that the facilities meet national sports standards and use high-quality, durable materials to ensure student safety^[4].

3.3. Strengthen the application of digital technology to narrow the gap in sports facilities between urban and rural schools

In terms of strengthening the application of digital technology, schools can enrich and improve facilities by introducing various high-tech equipment and systems. For example, smart wearable devices can be used to monitor students' heart rate, steps, movement trajectory, and other data during exercise, which can help students better understand their physical condition and exercise effects. In addition, schools can also use mobile applications to record students' exercise data and provide them with personalized exercise suggestions. At the same time, schools can use virtual reality (VR) and augmented reality (AR) technology to simulate different sports scenes, such as virtual skiing, virtual archery, etc., which can not only increase the fun of physical education courses but also provide a safer learning environment and create virtual sports facilities. For example, through VR technology, students can experience high-risk sports such as rock climbing and parachuting without actual risks. At the same time, digital technology can also help teachers manage physical education courses more effectively, such as electronic roll-call systems, online attendance and grade management, etc. In addition, schools can also use online platforms to hold virtual sports events, such as virtual running competitions, virtual basketball games, etc., which can not only stimulate students' competitive interest but also provide a wider competition platform for students to communicate and compete with students from different schools. The integration of these technologies can not only improve the quality and diversity of sports facilities but also cultivate students' understanding and ability to use technology, helping them better adapt to the digital age in their future studies and lives.

3.4. Establish a reasonable usage system to improve the efficiency of facility utilization

Start with improving the professional level and number of physical education teachers, while improving the design of physical education courses to make them more focused on practice and the all-round development of students.

Improving the efficiency of school sports facilities is essential to ensure their long-term sustainability and maximize the benefits to students and the community. This includes taking steps to strengthen maintenance and management measures while strengthening cooperation with social resources to improve the utilization of facilities. First, strengthening the maintenance and management of facilities is essential to extending their service life and preventing their premature deterioration. This includes establishing regular inspection and maintenance plans to identify and solve any problems in a timely manner. By performing routine inspections of equipment, surfaces, and infrastructure, maintenance staff can detect wear and tear early and take preventive measures to avoid expensive repairs or replacements. In addition, investing in high-quality materials and equipment, as well as hiring skilled maintenance staff, can help ensure that facilities remain safe, functional, and beautiful for years to come. In addition, strengthening facility management involves implementing effective reservation and scheduling systems to optimize the use of available space and resources. By adopting digital reservation platforms or software solutions, schools can streamline the process of booking sports venues, coordinating activities, and managing resources such as equipment and personnel. This not only reduces administrative overhead, but also improves transparency and accessibility, making it easier for students, faculty, staff, and community members to access and utilize sports facilities. Strengthening docking with social resources is essential to expanding facility utilization channels and maximizing their community impact. This includes building partnerships with local sports clubs, community organizations, and government agencies to tap into their resources, expertise, and networks.

To maximize the utilization of school sports facilities, a well-thought-out usage system must be in place. Comprehensive and flexible scheduling is key to ensuring that school sports facilities are used effectively. School sports facility scheduling should take into account the various needs of different groups, including physical education classes, sports teams, extracurricular activities, and students. To optimize scheduling, schools can use digital booking systems that allow students to book time slots for specific facilities. This not only helps avoid double bookings but also allows scheduling to be adjusted as needed. In addition, schedules should include designated maintenance times to ensure that facilities are always in good condition. Establishing clear usage rules and a sound management system is key to maintaining order and ensuring the longevity of sports facilities. Usage rules cover aspects such as dress, behavior, equipment handling, and safety. At the same time, there should be a management system to enforce usage rules and resolve any problems that arise. This system can include staff assigned to monitor facility usage, maintain equipment, and provide assistance when needed. To maximize utilization, schools should consider opening sports facilities to the public after school hours. Renting facilities to local sports clubs, and social organizations, or even hosting public events. These initiatives not only increase usage but also bring additional income for the maintenance and upgrading of sports facilities.

3.5. Actively organize sports events and encourage students to participate

In the context of a strong sports nation, the development and utilization of school sports facilities should pay more attention to actively carrying out sports events to improve students' enthusiasm and participation in sports. For example, schools should regularly hold various sports events, such as inter-school games, basketball leagues, football-friendly matches, etc., to provide students with a wide range of opportunities to participate. These events are not only a platform for displaying sports skills, but also an important way to

cultivate team spirit and school cohesion. For example, by regularly holding basketball leagues, students' basketball skills can be improved, competition and cooperation between classes can be strengthened, and students' sense of collective honor can be enhanced. Secondly, schools can adopt innovative ways to hold sports events, such as introducing emerging sports (such as street dance, extreme sports, etc.). In addition, schools should also actively use modern scientific and technological means, such as live broadcasting of competitions through campus websites or social media platforms, to increase the viewing and interactivity of the competition. In this process, to better stimulate students' enthusiasm for participation, schools can also set up various awards, such as the best athlete award and the team spirit award, to commend students and teams who have performed well in sports activities.

Schools should also encourage teachers and parents to actively participate in sports events, not only as spectators to support students but also as coaches or referees to participate in the organization and operation of the game. This model of home-school cooperation can not only strengthen the connection between students, parents, and teachers but also create a healthier and more positive sports atmosphere for students. Through the implementation of these measures, schools can effectively increase students' interest and participation in sports activities, promote their physical and mental health, and at the same time improve the efficiency and benefits of the use of school sports facilities ^[5].

4. Conclusion

In the context of a strong sports nation, the construction and management of school sports facilities are of vital importance. The strategies and suggestions proposed in this article are aimed at optimizing facilities, encouraging students to form good exercise habits, and promoting the development of school sports facilities. It is hoped that these measures will contribute to the sustainable development of school sports and the all-round growth of students.

Disclosure statement

The author declares no conflict of interest.

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