

The Realistic Dilemma and Construction Strategy of the Development of Sports Laboratory in Colleges and Universities

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ABSTRACT. Standardized management of laboratories is conducive to the scientific use of equipment and instruments, and is conducive to experimental teaching and the improvement of students' hands-on ability. It has important theoretical and practical value for talent training in colleges and universities. This article uses literature research methods and logical analysis research methods, according to the characteristics of colleges and universities sports laboratories, finds out the problems in management and the difficulties in development in reality, and proposes effective construction strategies and development ideas. Giving full play to the role of laboratories, producing more scientific research results, improving the level of science and technology, and cultivating qualified personnel for the society has important theoretical and practical significance.

KEYWORDS: sports laboratory, management, teaching

1. Introduction

Laboratory work in colleges and universities is the basic work of talent training in colleges and universities, and it is the training of experimental teaching and operational skills for students. It plays a vital role in the modern education system. The health of students is an important indicator of the overall development of students. College students' physical fitness testing center is an important part of college laboratories, and it plays an important role in stimulating students' interest in sports, enhancing students' physical fitness, improving their health, cultivating students' comprehensive ability, promoting the reform of physical education system, and implementing quality education [1]. Research on the construction of physical education laboratories in colleges and universities can provide new ideas for deepening the reform of physical education in colleges and universities, explore effective paths for the comprehensive improvement of physical education reform and talent training in colleges and universities, and can also make sports laboratories better serving the construction and development of sports disciplines.

2. Current status of construction and planning of physical education laboratories in colleges and universities

Through investigation and research, it is found that many domestic colleges and universities have built public sports laboratories including sports activity rooms, physical fitness testing rooms, rehabilitation and health care rooms, and sports psychology testing and training rooms. The construction of the laboratory can basically complete the functions of teaching and physical fitness testing for general department students, but there are still many shortcomings [2]. The specific manifestations are as follows: First, with the continuous expansion of the enrollment scale of colleges and universities, the problem of the inconsistency between the area of public sports laboratory and the number of students has become increasingly prominent; second, many colleges and universities have not invested enough in public sports experimental equipment, and the equipment is outdated It is backward and cannot meet the needs of students; third, the proportion of full-time experimental teachers in public sports laboratories in colleges and universities is too low to meet the teaching needs; fourth, the laboratory management system is not smooth, which is not conducive to the development of public physical education.

3. Realistic dilemma in the development of physical education laboratory in colleges and universities

3.1 Low utilization rate

With the rapid development of my country's national economy, the construction and management of university laboratories has developed rapidly. As the carrier of experimental teaching, university laboratories are not only an important part of the entire teaching system, but also an important base for universities to train high-quality talents. The development and teaching level of colleges and universities depend to a certain extent on the construction and management level of college laboratory equipment [3]. Therefore, we must fully understand the status and role of the laboratory and its management in running a school.

The purpose of establishing a laboratory for physical education majors is to promote professional teaching and scientific research, as well as to enhance students' practical ability. Therefore, students, teachers, and laboratory management personnel are required to work together to use the instruments well, and give full play to their role in teaching and scientific research. It is necessary to strengthen the opening of the laboratory and increase the utilization rate of the equipment. Teachers and experimenters must be good at using the experimental conditions to guide students in their learning. Students can also strengthen the consolidation of the knowledge learned in the classroom through the operation of the laboratory equipment the room truly becomes a sea of learning and a paradise of knowledge. Make full use of the laboratory's equipment and existing conditions, try to build the laboratory into a laboratory that is fully open to teachers and students, avoid unused equipment, avoid formalization, start from teaching and student learning, and follow

The overall pace of the construction of physical education disciplines should be pragmatic, not ostentatious. In the actual operation process, the utilization rate of sports laboratories is very low, and many equipments have been dust-sealed for many years or have been damaged because they have been idle for too long. This goes against the original intention of establishing the laboratory, nor does it achieve the expected goal of the laboratory in teaching and scientific research.

3.2 Management philosophy lags behind

Comprehensively promoting the quality education of college students has become an urgent task facing the reform of higher education today. Quality education focuses on improving the comprehensive skill level and practical ability of college students, and cultivates talents with innovative ability [4]. As an important base for college students' quality education and practical ability training, college laboratories have also received more and more attention from the education circle. The traditional laboratory management concept lacks the guidance of new concepts such as human-based management and cultural management, and neglects that the purpose of the experiment is to cultivate people and cultivate talents with innovative consciousness and innovative ability. Therefore, the concept of laboratory management needs to be updated. In laboratory management, the traditional model is based on administrative orders as the main means, and the ultimate goal is to complete the tasks assigned by the superior. This traditional management mode makes the existing resources of university laboratories unable to be effectively used, the effect of experimental teaching is not satisfactory, and the passive work attitude lacking innovative spirit is not conducive to the overall development of laboratory management personnel, thus forming the university laboratory a vicious circle of chronic diseases in management.

3.3 Low investment

With the development of social economy and the further deepening of the construction of an innovative society, the construction and management of laboratories have also received more and more attention from the society and higher education circles. The physical education laboratory of a comprehensive university is not only different from professional physical education colleges, but also different from the laboratory of normal universities in the true sense. Its investment funds mainly come from school finance [5]. Due to the low school funding, the funds directly invested in laboratory construction are limited, and the labor, material and financial resources for laboratory construction are tight. Strengthen management, formulate strict rules and regulations, standardize management procedures, and make them more scientific, standardized, and institutionalized. At the same time, explore the implementation of a diversified funding model, from the perspective of open laboratory management, to transform the laboratory from a single experimental teaching to a diversified laboratory, so as to further expand the laboratory's functions and funding sources, and promote the laboratory the management work of the

company is developing in a modern and scientific direction. Through the incentive mechanism, attract some scientific and technical personnel with higher professional level to the laboratory management team. At the same time, it is necessary to organize a part of the laboratory technicians with both ability and political integrity and excellent quality to learn advanced theoretical knowledge to enrich and improve the experimental methods, to improve the comprehensive quality of the experimental technical team.

4. Strategies for the construction of sports Laboratory in colleges and universities

4.1 Straighten out the management system

In order to give full play to the role of sports laboratories in colleges and universities, the school authorities should conduct extensive investigations and rationalize the management system of sports laboratories in accordance with the actual conditions of the school. By formulating various rules and regulations, setting up corresponding positions, clarifying the work responsibilities of experiment directors and experimenters, and clarifying the tasks of the sports laboratory; mobilizing laboratory managers, experiment teachers and experimental technicians by formulating corresponding reward and punishment systems enthusiasm for work, to maximize the creation of a good teaching and scientific research atmosphere.

4.2 Make full use of modern information technology

Make full use of the current network and information technology to provide technical support for the data collection, transmission, analysis and processing of students' physical fitness and physical fitness and the decision-making of exercise programs [6-7]. Modern wearable devices make full use of sensor technology, and can easily collect students' body (such as weight, sleep, heartbeat, blood pressure, etc.) and exercise information (such as exercise intensity, walking steps, calories, etc.) anytime and anywhere. Technology (such as local area network, Bluetooth, etc.) can easily transmit physical data remotely, and cloud computing technology is convenient for data storage, analysis and processing. These technologies make it possible to learn and exercise from qualitative to quantitative. Both the construction of the laboratory and the teachers and students should be able to adapt to this development. Students can make learning and training plans according to their actual conditions to achieve the best physical condition. And this kind of scientific concept and method will make students pay more attention to the benefits instead of the traditional "fishing for three days and drying the net for two days" and sheep-herding exercise methods. Teachers can check the students' after-class practice at any time according to the needs of the course, supervise and remind students to actively participate in sports. Teachers can also make full use of the various favorable conditions of the Internet + era to effectively solve the general physical problems of young people (such as overweight, myopia, three high and low

age, etc.), and propose practical and feasible solutions for the improvement of the physical fitness of the whole people solution.

4.3 Establish a "sports laboratory" for college students

The 2014 Youth Olympic Games was held in Nanjing, Jiangsu. The "Sports Laboratory" initiated by the Chairman of the International Olympic Committee Bach was well received by the masses. As a new thing in the Youth Olympic Games, masters of rock climbing, roller skating, martial arts, skateboarding and other projects perform on-site performances and guide visitors to experience it in person [8]. Its experimental function is to test how attractive non-traditional Olympic events are to young athletes and spectators. Colleges and universities can also learn from this approach, by establishing "sports labs", research and excavate sports items that contemporary college students are interested in before class, and appropriately increase or decrease corresponding elective courses and establish corresponding sports based on statistical data places and facilities.

4.4 Establish and improve public sports network resources

With the help of MOOCs and on-campus online learning platforms, students are provided with a wealth of learning resources such as sports skills explanations, video analysis of various events, ball tactics teaching platforms, sports aesthetics appreciation and other learning resources, and the use of new computer-assisted teaching and flipped teaching methods to enrich the public the teaching form of physical education stimulates students' interest in learning; funds are invested to develop public sports mobile apps and install them on the clients of teachers and students for physical fitness test data analysis, real-time recording and assessment of students' participation in physical activities. The advent of the era of big data can abandon the phenomenon of "information islands" in the past, allowing teachers to understand the effects of students' classes in time through advanced information technology.

4.5 Establish a virtual simulation center for sports skills teaching

In accordance with the requirements of the construction of virtual simulation center proposed by the Ministry of Education of "to be true to reality, to complement each other, and to combine virtual reality", the problem of teacher's explanation of movements in physical skills teaching is limited by factors such as time, space, and speed. Information technology has set up a virtual simulation center, which will perform detailed action decomposition of the sports skills to be explained, fundamentally overcome the shortcomings of the traditional teaching mode in the form of virtual simulation, scientifically control the entire sports skills teaching process, and maximize public sports teaching the benefits.

5. Conclusion

Laboratory construction and management is a systematic project. The construction of sports laboratories in ordinary colleges and universities should be guided by the ideas of modern scientific management, combined with the characteristics of sports experiment itself, and proceed from reality to make the construction and management of college sports laboratories more scientific, standardized and institutionalized. People-oriented is the core of the scientific development concept, and it is also the internal requirement of the harmonious development of colleges and universities and the basic principle that the laboratory personnel management must adhere to. The quality of laboratory management in colleges and universities also directly affects the construction of laboratories, the quality of experimental teaching and scientific research results. The reform of the management mode of physical education laboratory in colleges and universities must also start with the scientific management of the management system. It is necessary to establish a corresponding training mechanism for the laboratory management team, organize and encourage laboratory management personnel to participate in professional training, continue to learn professional theoretical knowledge, continue to summarize experience, and improve their own professional level and professional quality. It is necessary to put experimental teaching and theoretical teaching in an equally important position, and fully affirm the important position of laboratory management personnel in education, and fully mobilize their enthusiasm to establish a sound incentive mechanism.

References

- [1] Guo Haisheng. Problems in the management of physical education laboratories in comprehensive universities [J]. Value Engineering, 2011 (23): 202.
- [2] Zhao Zhen. Thoughts on laboratory management in colleges and universities [J]. Journal of Lanzhou Institute of Education, 2011 (1): 108-109.
- [3] Chang Shuzhi. A Preliminary Study on the Operating Mechanism of the Laboratory in Physical Education Colleges and Universities [J]. High Education Journal, 2017 (10): 128-129.
- [4] Li Xin. Investigation and Research on the Construction of Physical Education Laboratory in Normal Universities [J]. Chinese Market, 2015 (33): 256-257.
- [5] Zhou Xuebing. The construction of physical education laboratory in general colleges and universities[J]. Laboratory Research and Exploration, 2013 (10): 461-464.
- [6] Cui Bing. The conception of the open management of the sports laboratory [J]. Laboratory Science, 2006 (1): 89-92.
- [7] Wang Zhenwu. On the reform of physical education laboratory [J]. Laboratory research and exploration, 2002 (3): 30-31.
- [8] Wang Bing. The construction of sports teaching skills innovation laboratory [J]. Journal of Wuhan Institute of Physical Education, 2013 (8): 82-84.