

Path of Integrated Development of Health Education and School Physical Education in the Context of the Great Health Era

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Abstract: How to better play the educational function of sports is the fundamental way for education to return to "educating people". This article provided the relationship between the concept of big health and school sports, as well as the limitations of the current development of school sports health. Viewpoints, such as establishing the concept of "health first", fully leveraging the comprehensive educational role of school physical education, reforming teaching methods, and enriching the content and form of physical education practice, were provided. The experimental group formed a cross disciplinary teaching team to carry out teaching in both physical education and health education. The control group consisted of a group of traditional teachers who carried out health education and physical education teaching in schools. Evaluation indicators: methods such as questionnaire surveys and teacher interviews were used to compare the experimental class with the control class. In terms of teaching effectiveness and learning experience scores, the experimental group's teaching effectiveness and learning experience scores were both greater than 8 points. The teaching effectiveness and learning experience scores of the control group were both less than 8 points, which was beneficial for promoting the integration and development of health education and school physical education.

1. Introduction

People's physical condition is the foundation of a society's civilization and development, as well as a symbol of the prosperity and development of a nation. On this basis, this article utilizes the guiding ideology of "great health" to carry out sports activities in schools, promoting the coordinated development of students' culture and sports activities. In the process of physical education teaching, it is not only necessary to cultivate students' interest in sports, but also to develop their sports skills, exercise their willpower, form their spiritual outlook, personality, and values. In school physical education teaching, to establish the concept of "health first", it is

necessary to lay a solid foundation.

This article first provides a general background on the integration and development of health education and school sports in the context of the era of great health, and the relationship between the concept of great health and school sports. In the practical thinking of the "health first" concept in school physical education teaching, the relationship between the concept of health and school physical education is an in-depth exploration of the internal connection between "health" and "sports". Secondly, the path of integrating health education and school physical education in the context of the era of great health is explored. In terms of physical education teaching mode, the focus should be on enriching the practical content of physical education teaching and expanding the knowledge field of health education. Finally, a test is conducted on the effectiveness of integrating health education and school physical education in the context of the era of great health.

2. Related Work

The concept of great health refers to the development of a healthy habit, method, concept, and sharing of health values based on the realization of physical and mental health, summarizing practical experience and consolidating theoretical achievements. It includes a complete concept of health and specific ways of promoting health. Mao Zhenming believed that the major challenges faced by the development of school physical education in China in the new era are being addressed through the reform of the examination system in the context of "exam oriented education". After more than 30 years of theoretical and practical experience in "middle school entrance examination physical education", "high school entrance examination physical education" has once again been highly regarded as a completely new physical education examination system [1]. Wang Xiaozan believed that there is a certain deviation in society's understanding of "physical health", which has resulted in China currently not forming a complete social understanding and support environment. The implementation of the Action Plan for Promoting Sports and Health for Children and Adolescents should be comprehensively promoted at several levels, including the implementation of high-quality courses, the construction of vibrant campuses, the diverse linkage between families, schools, and communities, scientific event organization, and intelligent monitoring of sports [2]. Yan Jun selected students from the first and second year of junior high school in the city as the research subjects. A total of 303 valid samples were divided into a control group and an experimental group with different exercise frequencies, and a school sports questionnaire survey was conducted [3]. Taking the rural area of Hainan as an example, Honghai Li conducted research on rural health care in Hainan, providing decision-making support for the construction of the "Healthy Hainan" sector and the development of rural health services in Hainan [4]. Xiong Wen believed that the idea of "health first" in the context of school education emphasizes "learning to reduce burden", but lacks direct connection with sports. He believed that it is necessary to be wary of the alienation trend of "health sports" and "biological sports" [5]. However, their research only explored healthy sports, and their connection in the context of overall health is still lacking.

In the education stage, quality education is an important component. In China, physical education teaching in universities is a very necessary task, and providing quality education for students is of great significance [6-7]. Strengthening the foundation of school physical education is of great significance in promoting the healthy growth of young people, enhancing their core literacy, cultivating good behavioral habits, and cultivating the concept of lifelong physical exercise [8]. School physical education should have a high position, a broad perspective, and be coordinated with the national strategy of prioritizing health development. It plays a crucial role in the formation and improvement of personality and the practice of socialist core values.

3. Methods

3.1 Relationship between the Concept of Great Health and School Physical Education

(1) Practical reflection on the concept of "health first" in school physical education teaching

The relationship between "health concept" and "school sports" is an in-depth exploration of the internal connection between "health" and "sports". At present, some scholars have a confused understanding of the relationship between "fitness" and "school sports". However, the objective fact that sports can promote the physical and mental health of students has also led people to think that there is the most direct connection between health and sports, and school sports bear the greatest responsibility for the decline of students' physical fitness. How can sports have such great power? Sports do have benefits for physical health, but these benefits are limited and one-sided.

(2) Research on the correlation between school physical education and health concepts

The basic goal of school physical education teaching is to promote the physical and mental health of students. However, whether it is the spirit of sunshine sports, lifelong sports awareness, or the concept of "health first", their ultimate goal is to promote the physical health of students [9-10]. For example, lifelong sports awareness is to cultivate students' sports abilities, interests, hobbies, and habits in physical education, and learn some sports skills to prepare for sports activities after graduation. This concept reflects the spirit of sustainable development in the era. The concept of lifelong sports is to place the cultivation of students' physical and mental health in a dynamic field. It demonstrates that a healthy body and mind cannot be formed overnight, it is a long-term accumulation and continuous development process. School physical education is an important place to cultivate lifelong sports awareness among college students. The concept of "health first" has been proposed for a long time, pointing out the direction for the development of school physical education. Nowadays, the concept of "health first" is not only about strengthening physical fitness, but also reflects a concept of physical education teaching and education [11].

Health condition index formula:

$$H = f(P, E, M, G) \quad (1)$$

H: health condition index; P: personal health behaviors (such as diet, exercise, etc.); E: environmental factors (such as air quality, community facilities, etc.); M: healthcare services; G: health literacy level (including the ability to obtain and understand health information).

The formula for energy consumption in sports activities:

$$x_h = mct \quad (2)$$

x_h : energy consumption; m: exercise time; c: exercise intensity.

Psychological health assessment formula:

$$x_p = S + \gamma + A \quad (3)$$

x_p : psychological health assessment value.

The evaluation formula for the integration of health education and school sports development:

$$F = \sum_{k=0}^n \binom{n}{k} x^{kf(H, E, M, P)^{n-k}} \quad (4)$$

F: integrated development evaluation value.

3.2 Limitations of the Current Healthy Development of Physical Education in Schools

(1) Safety is more important than health

The actual situation shows that the successful implementation of school physical education work must be based on the safety of students. Some schools and physical education teachers, in order to ensure that students can attend classes safely and complete teaching content safely, have eliminated some dangerous sports activities, such as long-distance running in middle school physical education teaching and gymnastics in primary school physical education teaching [12-13]. Therefore, some teachers use "whether students have fun" and "whether students have any safety accidents" as criteria to measure the success or failure of physical education classes. This results in students not being able to acquire sports skills in physical education classes, nor can they form a lifelong awareness of sports, thereby affecting their physical fitness and causing a series of unhealthy behaviors. In fact, in school physical education teaching, there must be the infiltration of competitive sports. Whether it is sunshine sports, lifelong sports, or happiness sports, students need to be able to proficiently master their sports skills, use the sports skills they have learned, and have a happy and rich psychological experience in sports activities, so as to obtain a healthy physique and a sound mentality [14].

(2) Only the theory of "health first"

"Health oriented theory" is a theory that has emerged in school physical education teaching in recent years, which regards "health first" as an important or only function of school physical education, resulting in certain differences in theoretical construction and practical operation of school physical education. The rationality of school physical education and physical education curriculum should also be attributed to the rationalization of school physical education. The concept of "health first" provides guidance for the development of school physical education, but physical education teaching is not the only way to improve students' physical fitness, and improving students' physical fitness is not simply about improving physical fitness. The meaning of "health first" should be defined, and health should be integrated into every level of education.

(3) "Sunshine sports"

At present, some schools have not yet recognized the true significance of sunshine sports and regard it as a kind of sports activity under the sunshine. They only engage in one hour of exercise under the sunshine, walking through the motions, making "sunshine sports" a form of walking through the motions and dealing with superior assessments, which cannot truly reflect the purpose of "sunshine sports".

(4) "Happy sports"

However, some schools have truly transformed happy sports into happy sports, turning physical education classes into game classes and organizing students to play games. They have lost the opportunity to teach sports skills in physical education classes, and making students happy is their goal. This has greatly reduced the difficulty of teaching, chaotic and disorderly classroom teaching, and ultimately led to a decline in students' physical fitness.

3.3 Promoting the Improvement of School Physical Education Level through Reform

(1) Establishing the concept of "health first" and fully leveraging the comprehensive educational role of school physical education

It is necessary to put students first, taking into account the stage characteristics and individual differences of their growth and development. Daily education and individual development of students need to be organically linked, fully mobilizing their enthusiasm and initiative. The cultivation of students' physical fitness is a complete system, and its ultimate goal is to achieve comprehensive human development. Incorporating sports literacy into the subject knowledge system must be based on the developmental needs of students. In this process, attention should be paid to the integration and innovation of knowledge, and efforts should be made to form vertical

and horizontal connections within the disciplinary knowledge system. Firstly, it is necessary to actively promote the construction of integrated knowledge systems for large, medium, and small schools, ensuring the coherence and consistency of teaching content for each grade. It is necessary to make more use of gaming methods, strengthen the training of rough movements, and enhance the training of basic movement abilities. Students can learn some sports, mainly ball games and team events, but avoid early high-intensity specialized training. Schools should increase the proportion of skill learning while ensuring physical fitness, and attach importance to the continuation of students' interest in sports, encouraging them to continuously participate in sports projects. Secondly, the knowledge elements are screened and processed to clarify the connotation and extension of the disciplinary knowledge system. In the teaching process, it is necessary to not only focus on imparting technology, but also guide students on "why to practice" and "how to practice", so as to achieve a closed "knowledge loop". Finally, attention is paid to the integration between disciplines, and the internal logical relationships between disciplines are clarified, enabling the knowledge of each discipline to be interconnected. By using modules and thematic research, meaningful substantive connections between disciplines can be established, such as integrating ideological and political elements into the entire process of physical education.

(2) Reforming teaching methods and enriching the content and forms of physical education practice

Firstly, in the teaching mode of physical education, the focus should be on enriching the practical content of physical education, expanding the knowledge field of health education, focusing on the balanced development of basic sports skills and physical fitness of adolescents, placing specialized sports skills at the center of schools, and increasing the proportion of classroom competitions. The establishment of the "Healthy Physical Education" curriculum model in China not only provides an authoritative reference for the improvement of physical education models in Chinese universities, but also points out the direction for the implementation of the curriculum standards at the grassroots level. Secondly, it is necessary to fully utilize electronic information technology to build a "cloud based" learning platform and a "virtual real combination" learning mode, in order to improve the comprehensive quality of students. Especially in the current situation that the COVID-19 has not been completely eliminated, it is very necessary to expand the physical education curriculum of schools to families by means of informatization. At the execution level, it is necessary to attach importance to the development of digital teaching resources, transform thematic knowledge into numbers, and use methods such as sound and video to increase the interest and acceptance of learning resources. In the construction process, it is necessary to adhere to the concept of multiple functions, strive to integrate resource sharing, in flight classrooms, real-time evaluation, personalized feedback, etc., and enhance the comprehensiveness and usability of the platform.

(3) Determining the policy basis and enhancing the effectiveness of sports evaluation implementation

At present, the reform of China's physical education examination is still ongoing, and research on "sports and the college entrance examination" has also begun. Whether it is the middle school entrance examination or the college entrance examination, the center should be on "improving students' physical fitness", and the "leverage effect" of evaluation should be played well. The development goals of physical fitness, consciousness, skills, and behavior levels should be included in the construction of the sports assessment system. Firstly, starting from improving the scientificity of the exam content and the rationality of the exam structure, basic motor skills that play a decisive role in students' physical fitness are selected, and they are classified according to different energy consumption methods, allowing students to freely make choices. Secondly, the proportion of physical education testing subjects has been increased, with a focus on including some group sports projects that have a good foundation and are convenient for school sports development. At the same

time, it is necessary to actively combine with the requirements of the curriculum standards and actual sports scenes, and develop corresponding core structural technical evaluation standards for different types of sports projects. Finally, the process evaluation plan and supervision have been improved, and the comprehensiveness of the evaluation has been strengthened, promoting the transition of Chinese sports testing and evaluation methods from point to line. At the same time, attention should be paid to the dynamic adjustment of assessment content and evaluation standards. When designing a test plan, it is necessary to test and correct the pre-set test items and scoring standards to ensure a balance in the difficulty coefficients of the test questions.

4. Results and Discussion

4.1 Impact of Comprehensive Teaching on Students' Physical Fitness

Experimental group: Through various forms of comprehensive teaching activities such as project design and group cooperation, students are guided to apply health knowledge and skills.

Control group: Traditional physical education teaching focuses on training sports skills;

Evaluation indicators: Physical fitness indicators are compared between the experimental group and the control group using physical measurement data.

The differences in physical fitness indicators between the experimental group and the control group are shown in Table 1. In terms of physical fitness indicators, the endurance experimental group has a duration of 35.4 minutes, while the control group has a duration of 30.2 minutes. The sensitivity experimental group is 7.6 seconds, while the control group is 8.5 seconds.

Table 1: Differences in physical fitness indicators between the experimental group and the control group

Physical fitness indicators	Experimental group	Control group
Endurance (minutes)	35.4	30.2
Sensitivity (seconds)	7.6	8.5
Flexibility (centimeters)	25.3	23.6
Force (kg)	32.1	28.4
Speed (meters/second)	5.2	4.8

4.2 Evaluation of the Impact of Integrated Courses on Health Knowledge among College Students

Experimental group: The integrated curriculum plan is implemented, combining health education with physical education, and conducting teaching activities according to the needs of students at different age groups.

Control group: Conventional teaching methods are used to separate health education from exercise.

Evaluation indicators: The knowledge test method is used to compare health knowledge between the experimental group and the control group.

The scores of the health knowledge test and the compliance rate of health knowledge in the experimental group are shown in Figure 1. The experimental group scores 89.44 points on the health knowledge test, with a health knowledge compliance rate of 90.44%.

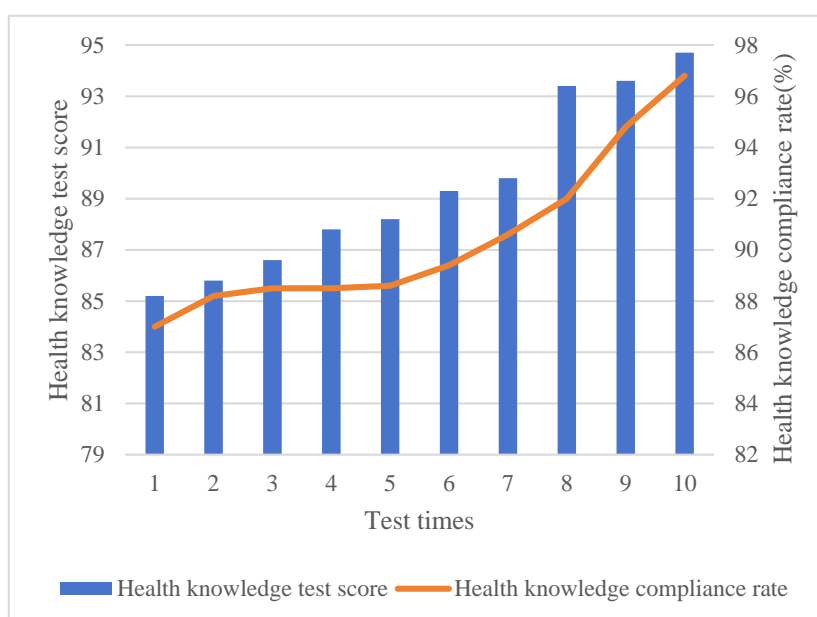


Figure 1: Health knowledge test scores and compliance rate of health knowledge in the experimental group

The health knowledge test scores and health knowledge compliance rate of the control group are shown in Figure 2. The control group scores 77.66 points on the health knowledge test and achieves a health knowledge compliance rate of 79.29%.

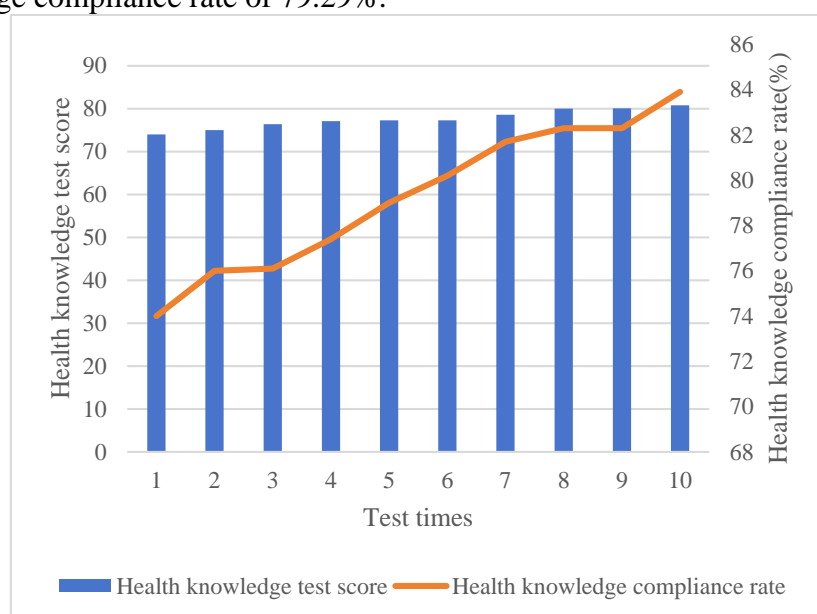


Figure 2: Health knowledge test scores and compliance rate of health knowledge in the control group

4.3 Comparison of the Impact of Interdisciplinary and Traditional Teaching Staff on Integrated Development

Experimental group: A cross disciplinary teaching team is formed to carry out teaching in both physical education and health education.

Control group: A group composed of traditional teachers conducts health education and physical

education teaching in schools.

Evaluation indicators: Methods such as questionnaire surveys and teacher interviews are used to compare the experimental class with the control class.

The teaching effectiveness and learning experience scores of the experimental group are shown in Figure 3. The teaching effectiveness and learning experience scores of the experimental group are both greater than 8 points.

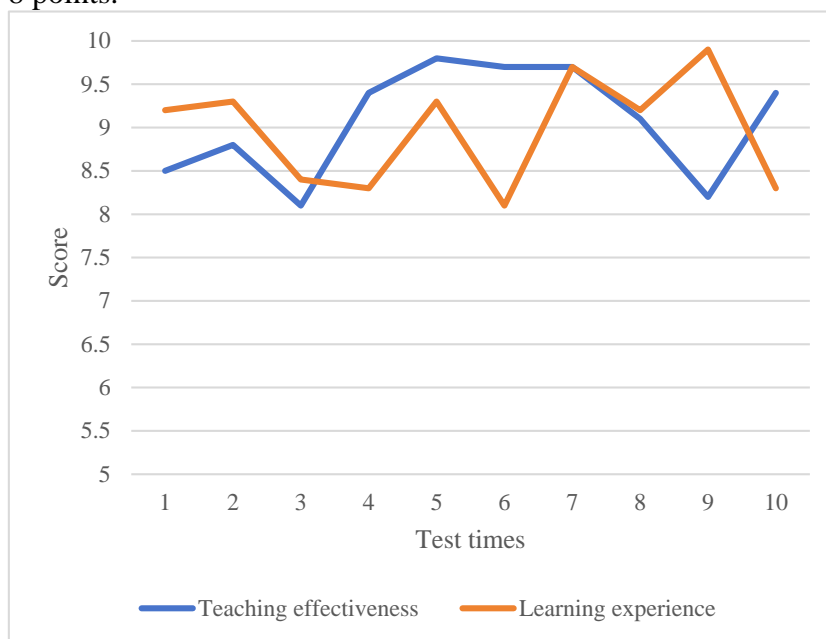


Figure 3: Teaching effectiveness and learning experience scores of the experimental group

The teaching effectiveness and learning experience scores of the control group are shown in Table 2. The teaching effectiveness and learning experience scores of the control group are both less than 8 points.

Table 2: Teaching effectiveness and learning experience scores of the control group

Test times	Teaching effectiveness(score)	Learning experience(score)
1	7.0	6.1
2	6.0	7.3
3	6.5	7.9
4	6.5	6.2
5	7.6	6.1
6	6.2	7.5
7	7.5	6.6
8	7.9	7.8
9	6.4	6.6
10	7.7	6.2

5. Conclusions

Currently, China has elevated "great health" to a national level, which is a once-in-a-lifetime opportunity and a severe test for school sports. This article explored how to develop school physical education in China to better serve "great health". Overall, the limitation of this article lies in the fact

that school physical education is a key and significant challenge for the national sports industry. However, regarding the current development status of school physical education, there are still problems such as short duration of physical education classes, insufficient allocation of physical education teachers, insufficient hardware facilities, and high concentration. In the future, it is necessary to comprehensively establish and improve the evaluation and supervision system of school physical education.

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