### **Research on the Construction and Practice of Health and Physical Fitness Training Courses for College Students Guided by Occupational Characteristics**

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Abstract: With the rapid development of the social economy, the demand for talents is also constantly increasing, especially the demand for healthy physical fitness of college students. However, there are certain problems in the current curriculum of health and physical fitness training for college students, such as a lack of specificity and weak practicality. Therefore, this study is guided by professional characteristics and explores the construction and practice of health and physical fitness training courses for college students, in order to provide theoretical basis and practical reference for the reform of physical education courses in vocational colleges. This study conducted in-depth analysis of the physical fitness needs of different occupational groups through literature review, expert interviews, and other methods, in order to determine the goals and content of the health and physical fitness training course for college students. On this basis, a curriculum system for healthy physical fitness training for college students has been constructed, including aerobic exercise, strength training, flexibility training, balance training, and speed and agility training, among other aspects. This course system aims to comprehensively improve the health and physical fitness level of college students, enhance their career adaptation ability. A college student health and physical fitness training course guided by career characteristics can significantly improve the physical fitness level of college students, enhance their health status, and enhance their career adaptation ability. In addition, the curriculum system also has high practicality and pertinence, which can meet the needs of different occupational groups for health and physical fitness training. This study also puts forward some suggestions for the reform of physical education courses in vocational colleges. Strengthen the construction of the curriculum system, pay attention to the practicality and pertinence of the course content; Pay attention to the construction of the teaching team, improve the professional competence and teaching ability of teachers; Strengthen school enterprise cooperation, fully utilize enterprise resources, and improve the practicality of the curriculum. This study, guided by professional characteristics, explores the construction and practice of health and physical fitness training courses for college students, providing a certain theoretical basis and practical reference for the reform of physical education courses in vocational colleges. In future education and teaching work, we should continue to deepen curriculum reform, improve the quality of talent cultivation, and meet the demand of society for high-quality talents.

## **Keywords:** occupational characteristics; College students; Healthy physical training; Curriculum construction; Practical research

College students are the future and hope of a country, and their health status is of great significance to the development of the country and the progress of society. However, current college students generally suffer from poor health conditions and a decline in physical fitness. To improve the health level of college students, it is necessary to carry out research on the construction and practice of health and physical fitness training courses based on the future career characteristics of college students. Foreign scholars have been paying attention to health fitness training since the last century, proposing many concepts and methods related to health fitness training, such as sports physiology, sports psychology, sports nutrition, etc. Regarding the establishment of physical fitness training courses for college students, many developed countries regard healthy physical fitness training as an important course in college education. Through scientific and reasonable curriculum design and teaching methods, the physical fitness of college students can be improved. In the research on career characteristics and physical fitness training, foreign scholars have conducted in-depth research on the relationship between future career characteristics of college students and healthy physical fitness training, and have proposed many valuable theoretical and practical achievements. In recent years, with the vigorous development of China's sports industry, the concept and methods of healthy physical fitness training have gradually been introduced into the field of physical fitness training for college students. Many domestic universities have begun to attempt to set up health and physical fitness training courses, improving the physical fitness of college students through theoretical teaching, practical training, and other methods. Domestic scholars have also begun to pay attention to the relationship between the future career characteristics of college students and healthy physical fitness training, and have conducted certain discussions on both theoretical and practical levels [1].

In summary, domestic and foreign scholars have achieved certain research results in the field of health fitness training, providing theoretical basis and practical experience for the construction and practical research of health fitness training courses based on the future career characteristics of college students. However, the construction and practical research of health and physical fitness training courses targeting the future career characteristics of college students of college students still need to be deepened to better meet the needs of their future career development. This article aims to analyze the future career characteristics of college students, and explore it in combination with practice.

### 1. Analysis of Future Career Characteristics of College Students in Vocational Colleges

With the development of society, the work of vocational college graduates is characterized by high intensity and long duration. In the future, the work intensity of college students in their careers will continue to increase, requiring them to have good physical fitness. The main goal of vocational colleges is to cultivate skilled talents. During their time in school, college students will receive professional skills training and practical operations, enabling them to have strong practical skills and skills in their future careers. Vocational colleges set majors based on market demand and industry characteristics. College students have a high level of professional knowledge in a specific field, which helps them quickly adapt and be competent in their future careers. Vocational college students often have a clear employment direction upon enrollment, which helps them focus on improving their professional skills and comprehensive qualities during their time in school, in order to better meet the needs of future career development. Vocational college students usually receive rich practical teaching and internship experiences during their time in school, which enables them to have strong adaptability and entrepreneurial awareness. They may be exposed to some entrepreneurial courses and practical activities during their time in school, which helps them to have certain entrepreneurial abilities and innovative spirit in their future career, and be able to quickly adapt to various work environments and cope with various challenges. Therefore, physical training related content can be integrated into professional courses, allowing students to simultaneously improve their physical fitness while learning and practicing professional skills. In practical work, vocational college graduates need to apply their professional skills to practical work, and physical fitness is one of the key factors for them to efficiently complete tasks in their work. Good physical fitness can help improve work efficiency, reduce work risks, and thus better achieve career development.

### 2.Construction of a Health and Physical Fitness Training Course System for College Students Based on Occupational Characteristics

### 2.1 Course objectives

Through health fitness training courses, improve the physical fitness of college students in various aspects such as strength, speed, flexibility, endurance, and agility. Enable college students to experience the joy of sports in their courses, cultivate their interest and hobby in sports, and thus develop the habit of actively participating in physical exercise. Through health fitness training courses, help college students shape a good posture and prevent posture problems caused by prolonged sitting or unhealthy lifestyle habits. Through team collaboration and competitive activities in the course, improve the psychological quality of college students and cultivate their positive attitude towards challenges and pressure<sup>[2]</sup>

### 2.2 Course Content

Including basic physical fitness training such as strength training, speed training, flexibility training, endurance training, and agility training, comprehensively improving the physical fitness of college students. Based on the future career characteristics of college students, specialized physical training related to their careers should be established, such as weightlifting and jumping training for strength oriented professions, coordination and stability training for skill oriented professions, and other specialized physical training. Teach common sports skills while exercising their physical fitness. Introduce the basic knowledge of exercise physiology and psychology to help college students understand the impact of exercise on their physical and psychological well-being, so that they can better engage in physical training. Teach college students the basic knowledge of sports nutrition, help them understand the relationship between exercise and nutrition, learn reasonable dietary combinations, and provide sufficient energy for physical training.

### 2.3 Course Implementation

Adopting a teaching form that combines theoretical teaching with practical training, allowing college students to not only master theoretical knowledge but also engage in practical operations, thereby improving training effectiveness. Based on the learning, living, and working characteristics of college students, arrange course time reasonably to ensure that they can actively participate in the course. Adopting various teaching methods, such as explanation, demonstration, training, discussion, etc., to enhance the interest and participation of college students in the course.

### 2.4 Course Evaluation

Evaluate the performance of college students in the course through factors such as attendance rate, classroom performance, and training situation. Evaluate the achievements of college students in the course through physical fitness tests, sports skill assessments, etc. Evaluate the comprehensive performance of college students in the curriculum by combining process evaluation and outcome evaluation.

Through the construction of the above four aspects, a complete college student health and physical fitness training curriculum system based on career characteristics will be formed, providing targeted physical fitness training for college students, helping them improve their physical fitness and better adapt to future career development.

# **3.**The Challenges and Solutions Faced by the Reform of Physical Education Curriculum in Vocational Colleges

Career adaptability of course content: Students in vocational colleges will face different work environments and lifestyles in the future. How to design course content that not only conforms to the laws of physical education but also meets the needs of professional physical fitness is a major challenge.

Shortage of teaching staff: Physical education teachers in vocational colleges often lack sufficient knowledge and experience in professional physical training. How to improve the professional ability of the teaching staff is a difficult point of reform.<sup>[3]</sup>

The depth and breadth of school enterprise cooperation: How to find suitable partners, achieve resource sharing and complementary advantages, and integrate enterprise elements into physical education courses is a problem that needs to be solved in the reform of physical education courses in vocational colleges.

The improvement of the curriculum evaluation system: How to establish an evaluation system that can comprehensively reflect the improvement of students' physical fitness, as well as the development of professional and comprehensive qualities, is the difficulty of reform.

Strengthening the integration of course content and career needs: By conducting in-depth research and analysis of the physical fitness needs of different occupational groups, designing corresponding physical education course content, and improving the practicality and pertinence of the course.

Strengthening the construction of the teaching staff: By providing professional training, introducing teachers with professional backgrounds, and encouraging teachers to participate in enterprise practice, we can enhance the professional ability and practical experience of the teaching staff.

Deepen school enterprise cooperation: Find partners who are aligned with the profession, establish long-term and stable cooperative relationships, jointly develop course resources, and achieve alignment between teaching content and professional standards.

(8) Improving the curriculum evaluation system: adopting diversified evaluation methods, combining process evaluation and summative evaluation, comprehensively evaluating students' learning outcomes, focusing on improving their physical fitness and cultivating their professional qualities.

## 4. Analysis of practical cases of health and physical fitness training courses for college students based on occupational characteristics

Case study on the practice of health and physical fitness training courses for college students based on occupational characteristics, taking tourism management as an example. Tourism management is a typical major in vocational colleges, and its graduates mainly focus on the tourism industry, engaging in work such as tour guides, tour guides, and scenic spot management. These jobs require high physical fitness from practitioners, such as long-term walking, climbing, and handling. Therefore, it is of great practical significance to carry out health and physical fitness training courses based on the occupational characteristics of students majoring in tourism management. The following is a practical case of a health and physical fitness training course for college students based on occupational characteristics. A health and physical fitness training course based on occupational characteristics was carried out for tourism management students in vocational colleges. Among them, the course objective is to improve the physical fitness of students, cultivate their interest in sports, shape good physique, and enhance their psychological quality. The physical fitness training course

for this major includes:

Basic physical training: including strength training, speed training, flexibility training, endurance training, sensitivity training, and other content.

Specialized physical training: Based on the characteristics of the tourism management profession, specialized physical training related to the profession is set up, such as hiking, mountain climbing, swimming, etc.

Sports skills training: Teach students common sports skills such as basketball, football, table tennis, etc.

Sports Physiology and Psychology Knowledge: Introduce the basic knowledge of sports physiology and psychology to help students understand the impact of exercise on their physical and psychological well-being.

Sports nutrition knowledge: Teach students the basic knowledge of sports nutrition, help them understand the relationship between exercise and nutrition, and learn how to make reasonable dietary combinations.<sup>[4]</sup>

Adopting a teaching format that combines theoretical teaching with practical training, allowing students to not only master theoretical knowledge but also engage in practical operations.

According to the characteristics of students' learning, life, and work, arrange course time reasonably to ensure that students can actively participate in the course.

Adopting various teaching methods, such as explanation, demonstration, training, discussion, etc., to enhance students' interest and participation in the course.

Evaluate the performance of students in the course through attendance rate, classroom performance, training situation, physical fitness testing, sports skills assessment, and other aspects.

#### 4.1 Case 1: Practice of Health and Physical Fitness Training Course for Medical College Students

Medical college students need to have strong physical fitness and good psychological qualities to cope with the pressure and challenges of future medical work. For this reason, a medical college has offered health and physical fitness training courses based on occupational characteristics.

Course setting: The course content includes basic physical training, professional physical training, psychological quality training, and health knowledge education. Basic physical training includes training in endurance, strength, speed, flexibility, and agility. Professional physical training is tailored to the characteristics of the medical profession, such as the need for operating room staff to have good hand eye coordination ability and long-term standing endurance, and corresponding training programs are designed. Psychological quality training improves students' psychological quality through methods such as team collaboration, stress management, and emotional regulation. Health education teaches students how to maintain good lifestyle habits and prevent diseases.

Course practice: The course adopts a teaching method that combines theory and practice, and students are trained under the guidance of professional coaches. At the same time, the course also introduces medical expert lectures, field visits, and other activities, enabling students to better integrate physical training with professional knowledge.

#### 4.2 Case 2: Practice of Health and Physical Fitness Training Course for IT Major College Students

IT major college students need to sit in front of the computer for a long time, which can easily lead to a decline in physical fitness. For this reason, a certain IT college has launched targeted health and physical fitness training courses.

Course setting: The course content includes basic physical fitness training, office skills training, psychological quality training, and health knowledge education. Basic physical training mainly aims to comprehensively improve the physical fitness of students. Office skills training teaches students how to maintain good posture and reduce the occurrence of occupational diseases in the office environment. Psychological quality training improves students' psychological quality through methods such as teamwork and communication skills. Health education teaches students how to maintain good lifestyle habits and prevent occupational diseases.

Course practice: The course adopts practical teaching as the main approach, and students are trained under the guidance of professional coaches. At the same time, the course also collaborates with enterprises, inviting in-service IT professionals to share work experience and health protection skills, so that students can better combine physical training with career needs.<sup>[5]</sup>

### 5.Suggestions for the Reform of Physical Education Curriculum in 6 Vocational Colleges

Course objective: Guided by professional characteristics, clarify the objectives of physical education courses, focus

on cultivating students' professional physical fitness and health literacy, and improve their adaptability and quality of life in future work.

Course content: Adjust and optimize the course content according to the physical needs of different occupational groups, and add occupational related physical training programs, such as endurance, strength, and flexibility training for the manufacturing industry. At the same time, emphasis should be placed on cultivating students' teamwork, competitiveness, and psychological qualities.

Curriculum system: Build a multi-level and diversified curriculum system, including compulsory courses, elective courses, and practical courses, to meet the learning needs and career development goals of different students.

Teaching methods: Adopt flexible and diverse teaching methods, such as case analysis, on-site teaching, competition activities, etc., to enhance students' interest and participation in learning. At the same time, emphasis should be placed on cultivating students' self-learning ability and innovative spirit.

Teacher team: Strengthen the construction of the teacher team, improve the professional competence and teaching ability of teachers. Introduce personnel with rich professional experience to serve as part-time teachers, providing students with practical experience and career guidance.

School enterprise cooperation: Strengthen cooperation with enterprises, industries, and other aspects, develop sports courses with professional characteristics, and provide students with internship, practical training, and employment opportunities.

Course evaluation: Establish a scientific and reasonable course evaluation system, focusing on improving students' physical fitness, career adaptability, and comprehensive quality development. Adopting a combination of process evaluation and summative evaluation to comprehensively evaluate students' learning outcomes.

Resource guarantee: Increase investment in physical education curriculum resources, improve sports facilities and equipment, and improve the conditions and quality of curriculum implementation. At the same time, make full use of online platforms and resources to expand students' learning channels and time.

Student participation: Encourage students to actively participate in physical education curriculum reform, pay attention to their needs and feedback, continuously adjust and optimize curriculum settings, and improve the pertinence and effectiveness of the curriculum.

The above suggestions will help promote the reform of physical education courses in vocational colleges, improve the quality of talent cultivation, and meet the demand of society for high-quality talents.

### 6.Results and Outlook

The construction and practical research of health and physical fitness training courses for college students based on occupational characteristics, and the implementation of health and physical fitness training courses based on occupational characteristics. The courses incorporate various sports and skill training, and special physical fitness training is carried out for different occupational characteristics, effectively preventing physical problems caused by prolonged sitting or bad habits, and helping college students shape a good physique. Through team collaboration and competitive activities in the course, the psychological qualities of college students have been exercised, and they can maintain a positive attitude when facing challenges and pressure, enhancing their ability to withstand pressure.

This study has important practical significance and application value. Through continuous optimization and improvement of the curriculum, it is expected to provide more targeted physical training for college students, helping them achieve better career development. Therefore, schools should attach importance to the construction of health and physical fitness training courses for college students, providing them with more opportunities and platforms for exercise. At the same time, college students themselves should actively participate in healthy physical training, laying a solid foundation for their future careers.

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