# Intelligent Information System Instructs the Difference Between Sports Theory and Practice, Computer-Aided Modeling

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**Abstract**: This paper studies the computer-assisted model of the difference between the theory and practice of physical education by the information system of the intelligent department. First, multimedia physical education courseware, physical education student learning courseware, physical education information inquiry and exchange, auxiliary physical education teaching research, office automation, etc. A lot of intelligent information guidance is provided, but there is a gap between theory and practice in the process of combining multimedia technology and physical education. The use of intelligent information systems to conduct computer-aided modeling of this gap shows that the gap is about  $4.5\% \sim 7.9\%$ .

Keywords: Intelligent Information System, Difference, Computer-Aided Modeling, Sports Theory and Practice

### **1. INTRODUCTION**

With the development of multimedia technology and the advent of the Internet age, it has had a certain impact on the traditional teaching mode, and the teaching concepts, teaching methods, teaching methods [1], etc. have also changed accordingly. Multimedia network teaching platforms based on multimedia technology, data technology [2], network technology, etc. have become the main trend of future development and are used in various fields [3] of education. Physical education is one of the important components of college teaching. With the expansion [4] of colleges and universities and the increase of students, the difficulty of teaching physical education teachers is increased [5] to some extent. How to integrate advanced teaching concepts and use CAI to build a multimedia network teaching [6] platform to promote college physical education the reform is currently one of the main tasks of college sports workers [7].

It can be seen that the research on college physical education based on the CAI multimedia [8] network teaching platform has certain practical significance and theoretical value. In physical education, there [9] is a huge difference between the teaching of physical education and other courses, which is reflected in the guidance of teachers [10] and the participation of students. The focus of physical education is on students' physical and mental activities [11]. Students use physical and mental activities. To achieve a unified connection, so as to carry out physical exercise, and [12] at the same time cultivate students' Olympic spirit. Computer-assisted teaching mainly combines sound, text, image [13] and video, and uses information technology as a supporting platform to carry out various teaching behaviors with the aid of computer technology [14]. Teaching content can use computer technology to achieve effective combination of sound, text, image and video for classroom teaching, which not only enriches the originally boring teaching content, but also greatly improves the initiative and enthusiasm of students in learning [15].

The rapid development of modern science and technology, especially the emergence of computer multimedia technology and the application of network technology, have brought profound changes to modern teaching, impacting traditional teaching models and teaching concepts, and causing changes in teaching methods and teaching methods. Computer-aided instruction (CAI) is the core content and main technical means of modern information technology applied to education. As a new modern teaching method and means [16], CAI has been widely used in various fields of education and teaching. However, in school physical education, both the application theory of CAI [17], practical application, software development, etc. are relatively lagging behind, and it is difficult to adapt to [18] the needs of modern physical education. This article will do some theoretical discussions on the concept of CAI [19], the significant role of CAI in school physical education application and development influencing factors, as well as development [20] countermeasures, in order to promote the development of [21] computer-assisted physical education. In cities and regions with first-class technology and developed economy [22], the multimedia equipment of major universities is already complete. However, in remote mountainous areas and poor primary [23] and secondary schools, it is difficult for them to have enough food and clothing with minimal financial investment [23], let alone to use multimedia technology for teaching [24].

Multimedia equipment is the support of computer-assisted teaching with multimedia technology, and the lack of hardware resources restricts the development of computerassisted teaching. In the process of multimedia-assisted teaching, computer software resources are indispensable. However, because the development of physical education auxiliary software touches many fields, multimedia-assisted teaching is in a state of serious shortage. How to make computer multimedia technology play its active role in physical education is a very serious subject. It not only involves the standardization of sports movements, but also involves the application of computer knowledge. This requires sports educators to update their traditions. The teaching concept, actively learning the application of computer software knowledge. Computer-aided instruction (CAI) is the core content and main technical means of applying computer information technology to education. In 1959, the American BIM company successfully developed the first computeraided instruction system (CAI), which is an important sign that mankind has entered the era of computer teaching applications. With the rapid development of computer technology, especially the development and improvement of multimedia technology, network application technology, and data compression technology.

# 2. THE PROPOSED METHODOLOGY

## 2.1 The Intelligent Information System

At present, more and more people are paying attention to the research on the application of big data in education. For example, Tan Zhongli et al. proposed a cloud computingbased big data and teaching training platform, and Tan Xiangwei et al. proposed the teaching reform of the Java course in the context of big data. It is also proposed to collect various data related to the Java course to obtain the students' usual learning situation, and use the model to automatically conduct the assessment. The big data research in the experimental course is mainly for the consideration of the experimental platform, lack of data analysis, and the results of the analysis cannot be used to guide the reform of teaching.

First, rely on the cloud computing platform to build a teaching platform for big data experiments. Use Hadoop and HDFS to build an experimental teaching platform for big data analysis, management, and storage, and build a network virtual laboratory based on the cloud platform. Install a computer operation record crawler in each student experiment machine, record all the students' operations during the entire experiment process (experimental operations on the virtual platform and all operations outside the platform), and upload them to the cloud platform. The cloud platform uses data mining and machine learning techniques to model historical experimental data and adjust the functions of the existing virtual platform. For example, the data of new students who use the virtual platform, such as providing auxiliary knowledge needed by students during the learning process, are also crawled Send to the cloud platform for processing in real time. The model analyzes the problems according to the current steps of the students' operations, and feeds them back to teachers and students in real time, helping teachers understand the students' experiments and correcting problems in the students' experiments in time. The operating data generated during the use of new users is also recorded, and the intelligent model is constantly revised.

# **2.2** The Information System Guides Sports Theory

There are two important factors that affect the popularization and development of multimedia-assisted physical education. First, at the leadership level, as traditional Chinese culture has been deeply rooted in the Chinese people's thinking, cultural courses have been the majors of Chinese students for thousands of years, and they have never paid attention to the cultivation of students' physical fitness, which has led to education departments and school leaders even Yu students' parents ignore the development of physical education. If you want computer multimedia technology to play an active role in physical education, it is necessary for the education authorities and school leaders to pay attention to physical education.

At the level of physical education teachers, the use of emerging computer multimedia technology has considerable difficulties for old teachers who have been engaged in physical education for many years. Many old teachers lack computer understanding. Classroom handouts need to be handwritten and cannot produce electronic courseware, so teachers are improved the emphasis on emerging information technology is an important factor in the development of multimedia-assisted physical education. Promote the development and application of physical education courseware in colleges and universities, and improve students' learning autonomy and initiative. College Physical Education Student Learning Courseware (CAL) is a new learning method based on the powerful interactive functions of computers and the development of modern network technology (hardware, software). The development and application of physical education courseware will change the traditional teaching methods and models, using multimedia microcomputers and modern information technology to create teaching situations that are consistent with the teaching content, so that students will be immersed, infected and inspired, and can be fully stimulated Students' interest in learning and thirst for knowledge, give play to the learning and training advantages of entertaining and learning, make students' learning behaviors from passive to active, make learning exercises easy and effective, and enhance students' initiative and autonomy in learning.

The development and application of computer-assisted physical education learning courseware has achieved satisfactory results. For example, the development and application of the software "the learning and testing system of sports and health care knowledge for middle school students" has proved this point well. Introduce computer-assisted learning technology in the teaching of physical exercise knowledge, health care, technical analysis, special theory and other sports theory courses, use computer-assisted physical learning courseware.

### 2.3 The Guiding the Difference Between Sports Theory and Practice, Computer-Aided Modeling

Traditional physical education teaching models in colleges and universities are mostly through teachers' explanations and demonstrations, and students' self-exercises to achieve the teaching goals. Sports movements are very dynamic, and it is often difficult for students to grasp the essentials of the movements from the teacher's demonstrations, and it is difficult to form intuitive and complete sports memories. In this regard, CAI-based physical education does not simply rely on CAI to enhance the classroom effect, but to make up for the shortcomings of the traditional physical education model, maximize teaching resources, create an interesting and interactive learning atmosphere, and stimulate students' passion for physical learning strengthen the teacher's office automation operation level, improve work efficiency and work effect.

In traditional physical education, physical education teachers manually input student data, and mainly rely on manual calculation. The amount of data is large and complex, which will inevitably cause teachers' irritability and cause certain errors. The introduction of multimedia computers and networks freed the majority of physical education teachers from these tedious tasks. In addition to Word, Excel and a large number of accounting software, the available software also includes practical application systems for physical education developed independently by colleges and universities, such as "College Student Physical Fitness Monitoring System", "Physical Education Performance Evaluation System", "Track and Field Games Arrangement and Performance Management System" and so on. These systems simplifies the work process to a certain extent, speeds up the work progress, frees many sports workers from tedious physical work, and saves them a lot of time and energy in conducting student sports research. Improve work efficiency to a large extent.

The sharing of resources is the biggest advantage of the network. Use modern network technology to obtain more materials and information needed for physical education, learn from the successful experiences and practices of others, update one's own physical teaching ideas and concepts, enrich one's own teaching materials, teaching methods, and teaching methods, thereby improving one's physical education teaching level. At the same time, you can pass your own things to others, and communicate with colleagues to the greatest extent.

#### 3. CONCLUSIONS

Multimedia teaching is the foundation for cultivating interest, ability and lifelong physical education. It is conducive to students' active learning, inspiring students' potential abilities, and exerting their personal strengths. At the same time, it also comprehensively improves students' ideological and moral quality, scientific and cultural quality, labor and life skills an important means of quality, social communication quality, physical and psychological quality. The application of multimedia technology has brought a qualitative leap in physical education. It not only intuitively solves the difficult problems in teaching, but also makes the teaching content from flat to three-dimensional, from static to motion, from text to sound and image, which will greatly increase the initiative and interest of classroom teaching

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