

# *Diversification of Physical Education Models in the Era of Big Data*

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**Abstract:** Due to the development of BD technology, the level of information dissemination at all levels is also constantly improving. In our country, there are also many contents that reflect civic education. This paper firstly introduces various forms of physical education research based on BD. Secondly, use BD technology to study real-time physical education resources, and explain how to distinguish physical education resources. The results of this study show that by examining differences in functional management, the actual impact efficiency of physical education teaching is increased by 16%. Through constructive analysis of textbooks and one of the best quality books on sports management in many schools, and students' physical quality has been greatly improved.

## **1. Introduction**

So far, most sports activities in our country are done outside of school. Modern education does not use BD, it is unscientific [1-2]. Such a response will greatly reduce physical education and may not improve the quality [3-4]. BD analyzed various methods and chose the most suitable education for our country, which is very important and influence of physical education in our country [5-6].

The use of BD technology has changed the way we work and think in different parts [7-8]. Lodewyk KR believes that the reform of PEC universities has reached an exciting stage, but we cannot ignore the fact that two studies in PEC universities are now weak and some educational systems are not performing well in reform [9]. Lander NJ believes that the reasons for the backwardness of training include some aspects of private university (PEC) training on the one hand, and the importance of PEC in historical issues on the other hand [10]. The reconstruction of modern sports began with the introduction of BD technology, developing the curriculum through computers, communications and the Internet. All of these provide a good foundation for understanding school sports in our country [11-12]. However, their study made a mistake of error.

The latest part of the project is the introduction of BD technology for development, including general technology, information and equipment development tools, and user authentication

technology. Content is based on questions identified in the research. According to the actual needs of physical education, according to the students' position, the research topic of this paper is set. And compare the overall structure of the system, analyze in detail how to manage physical education resources.

## 2. Physical Education Teaching Mode under BD Technology

### 2.1. Teaching Mode

Due to the simple unified construction of education management and content of the resource library of the National Academy of Sports Information (CAU), and no collaborative distributed model. The construction of teaching resources and app platforms for local sports events is not shared, resulting in the ineffectiveness of writing computer technology leading to the world of school sports.

Industry analysts at different levels view companies differently, but agree that companies have ethical rules (the company) and non-industry rules (the company). Ordinary corporations are laws made and enacted by legislators, governments, and corporations. The application of these rules must be implemented in principle and enforced through monitoring. The system includes laws, orders and regulations made and issued by states and governments, as well as laws and regulations made by civil society groups. Non-traditional rules (procedures) are behavioral concepts, values, moral rules, customs, etc. It has repeatedly dominated the historical evolution of human groups. The implementation of the informal system mainly depends on the invisible ability of everyone's thinking. The self-learning P-level model adopts a linear game control model equation.

$$X_t = \sum_{i=1}^p a_i x_{t-i} + \varepsilon_t \quad (1)$$

Among them is the physical education management mode factor

$$X_t = \sum_{j=0}^q \theta_j \varepsilon_{t-j} \quad (2)$$

Building MS Model

$$K = \exp(-(u - v) / 2 \times pl^2) \quad (3)$$

### 2.2. Physical Education Management System

With the development of software technology, people's ability to obtain information has been greatly improved. The development of BD data acquisition technology and the development of data storage technology that connects the world's information has also improved. Information systems can develop scientific solutions. After analyzing the possibility of the scheme, we continuously meet the needs of users and make adequate preparations; the system must have strong security guarantees. Because the application does the work of data management, it is important for the security of the system to be user-friendly and easy to work with.

As long as teachers are teaching at the forefront of physical education, there are great differences in culture, computer proficiency, course content and business skills. The information in the archive

is not important to the user during the preparation process, as long as the next step can be completed.

In view of the current sports media training and construction, mobile sports programs and sports media have been highly developed. Some departments or departments of China Agricultural University have experience in work activities, various sports training, online training, etc. The CAU Sports website is also well designed and complete. Some schools also share excellent PE programs with other CAUs on the PE website. However, due to the special needs of each school, there are still many colleges and universities behind the sports news and video library websites, and the worldwide use is jointly written and shared by colleges and universities.

### **3. Teaching Mode Management Experiment under BD**

#### **3.1. Teaching Mode Management System**

The physical education model is the product of the close combination of sports knowledge and physical education. What is taught is not only the practice of physical education, but also a well-organized and accessible summary of physical education experience. Its relationship with teaching and learning the closest. Therefore, it has extremely important practical value to carry out the model research. Although the research of modern theory has made significant progress in multi-level and multi-faceted. However, many front-line teachers are not very enthusiastic about the research of physical education teaching theory, thinking that the teaching theory is only the researcher's business. As a result, some middle school physical education teachers are always unable to get rid of the shackles of the old concepts in the use of teaching models. Wandering: and many other highly experienced physical education teachers have summarized distinctive and effective teaching methods on the basis of a lot of practice, but they are often difficult to work when they are promoted on a large scale. The root causes are often related to the teaching methods. It is not mature enough, and the research is not systematic enough. Organized and in-depth research in the form of education can improve the level of research on the one hand. and better integrate modern physical education. The application of teaching theory to practice has become an intermediary and bridge between theory and practice, so it has extremely important practical significance.

#### **3.2. Demand Analysis of Physical Education Model**

In view of the importance of physical education in public schools, we will quickly build a forum for everyone, implement a sports resource sharing forum, exchange resources within the school, reduce double construction, and enhance the school's sports awareness. The operating systems used by colleges and universities to share common sports resources vary by function type. Through a compilation and partitioning system. Each category has specific functions and is divided into 3 main sections. Part of 5 smaller parts.

Analysts at different levels view the system differently, but agree that the system has ethical rules and non-industry rules. Ordinary corporations are laws made and enacted by legislators, governments, and corporations. The application of these rules must be implemented in principle and enforced through monitoring. The system includes laws, orders and regulations made and issued by states and governments, as well as laws and regulations made by civil society groups. Non-traditional rules (procedures) are behavioral concepts, values, moral rules, customs, etc. It has

repeatedly dominated the historical evolution of human groups. The implementation of the informal system mainly depends on the invisible ability of everyone's thinking.

Students must first access our program. When students log in, if the connection fails, they must log in again. Once students are successfully connected to the program, students will enter Student Services to manage key personal information. The results are shown in Table 1.

Table 1. Physical Education Teaching Model Research

Number of hidden layer nodes	theoretical research	Experimental Study	Theoretical comparison,	Experimental comparison
Relative error percentage	61.4%	29.52%	5.42%	3.62%
Mean square error	102	49	9	6

#### 4. Construction of Physical Education Teaching Under BD

##### 4.1. Teaching Construction of Physical Education Management

Due to the convenience of sports media construction and the particularity of content in China Agricultural Sports University, there is no universal model for construction and distribution, and a large number of sports equipment are still being installed. The learning environment is an important source of education and teaching in colleges and universities in the news period, and an important part of digital education in the field of science and technology. The United States is investing in information technology colleges, setting up American IT companies, and using a large number of Internet resources to build an educational network.

The construction of computer equipment at the National Agricultural University has been started, the development has continued to increase, and cutting-edge equipment has made great progress. However, the investment in online education is insufficient, the construction of online teaching systems is not attractive enough, and the construction of online sports services is not satisfactory. The lack of institutional support for physical education has always been a matter of great concern to the government. The results are shown in Figure 1:

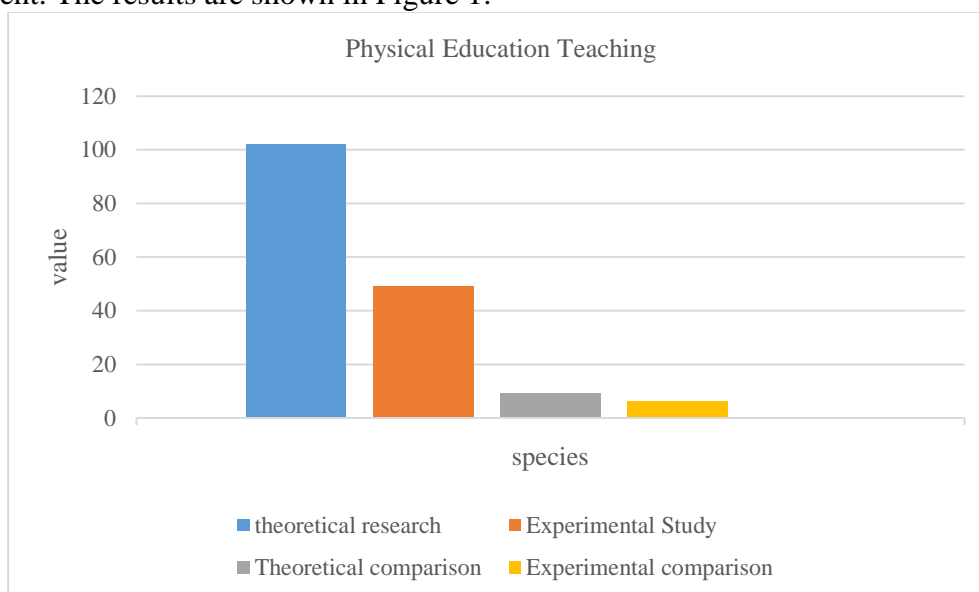


Figure 1. Comparison of physical education teaching research

The above data shows that the proportion of theoretical research is too much, the number of people engaged in teaching experimental research is too small, and the theoretical research with a large number of people stays at the elaboration of the meaning and role of the new physical education teaching model. There are not many in-depth research papers and repetitiveness.

#### 4.2. Physical Education Construction System Design

**Selective Physical Activity:** According to the school curriculum, select and implement quality curriculum and standard physical education curriculum.

**College Physical Education Course Catalog:** Combining quality courses with regular courses, Students can choose between quality and standard courses. The 6-month course consists of 16 weeks, and the first 6 weeks of physical activity are physical fitness concepts, including exercise and fitness, exercise and exercise avoidance. Physical Education is 7-16 weeks, teachers and students provide practical guidance based on the results of physical activities in physical examinations. The specific results are shown in Table 2. The higher the negative emotions towards sports learning: the scores of 6 items of positive interest are added together, the higher the scores indicate the higher the enthusiasm for sports learning; the scores of 5 items of autonomous learning are added, the higher the score indicates the more active in sports learning.

*Table 2. Comparison of case matching time*

Dimension	Entry	Score situation
Sports participation	9	8-45
Active interest	7	7-35
Negative interest	6	6-30
Autonomous learning degree	5	5-25

In addition to teaching in the classroom, students are encouraged to participate in special activities. The school distributes sports venues, provides recreational activities, and has a tutoring center. The number of morning exercises for students has increased to 40 per semester, double the number of regular students. Training must be done at least once a week under the supervision of a teacher. Train every day in the normal way. Exercise content: introduction to human life, basic physical health, the impact of exercise on the human body, health, exercise planning and exercise avoidance, medicine, the geometric world, human health, etc. 32 hours, 2 credits, 16 weeks of study, 2 hours per week. The selection process is free-form. Step 3: In the 15th week of the test, the subjects participated in the second practice, and the test results were announced during the test. In 16 weeks, attended the second retreat. The specific results are shown in Figure 2. After the test, the happiness of the classes with both teaching methods improved, but the happiness of the experimental class was higher.

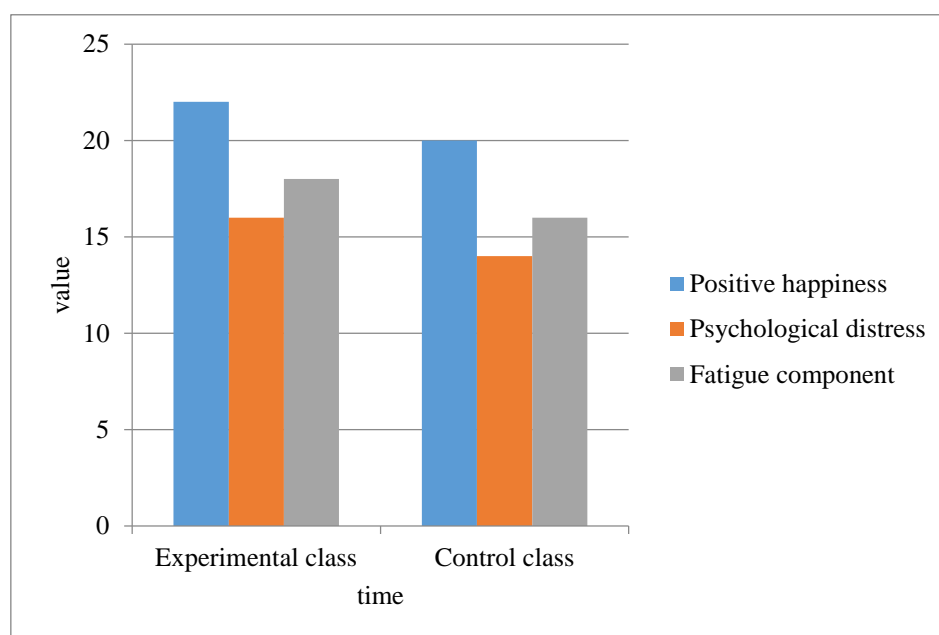


Figure 2. Comparison of case matching time

## 5. Conclusion

Although this work has yielded results in differentiating physical education management activities according to BD techniques, but there are some flaws. Depending on the content of the article, time and other reasons, this article cannot analyze and explain them one by one. The BD Tech Forum reduces the teaching experience requirement for PE teachers and may even ignore some of the benefits of traditional education over modern methods that are not yet known. Furthermore, the implementation of the BD kinematic learning model can be compared with traditional models from a scientific and simulation level.

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## Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

## Conflict of Interest

The author states that this article has no conflict of interest.

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