

## Research on Classification and Application of Physical Education Teaching Models Based on Network Environment

Dong Jinchang

Department Of Physical Education, Eastern Liaoning University, Dandong, Liaoning, China

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**Abstract:** At Present, College Physical Education is Increasingly Integrated with the Ever-Changing Computer Network. the Network Environment Has Brought Profound Influence on College Physical Education Teaching Modes and Methods, Which Means New Challenges to Schools, Teachers, Students and Other Related Subjects. by Using the Methods of Documentation and Logic, This Paper Makes a Preliminary Discussion on the Characteristics, Classification and Selection of Physical Education Teaching Modes. the Research Holds That the Physical Education Teaching Mode Has the Characteristics of Theory, Uniqueness, Operation, Openness, Excellent Effect and Stability. According to the Research, the Research on Our Country's Physical Education Teaching Mode Basically Includes Four Classification Methods Including Modern Education Theory, Physical Education Teaching Objectives, Physical Education Teaching Methods and Teaching Organization Forms. in the Application of Physical Education Teaching Mode, Attention Should Be Paid to the Transplanting and Grafting of Educational Theories, Grasping Various Factors and Characteristics, Paying Attention to the Orientation and Comprehensive Application of Strategies.

### 1. Introduction

With Mankind Stepping into the New Century, Modern Information Technology with Multimedia Computer and Network Technology as Its Core Has Developed Rapidly, Providing New Impetus and Unprecedented Opportunity for the Innovation of Modern Education [1]. Physical Education Teaching Mode is a Comprehensive Teaching Mode, Which Integrates Teaching Forms and Teaching Methods, Embodies the Teaching System and Teaching Process, Becomes the Most Critical Link in Physical Education Teaching, Communicates the Relationship between Physical Education Teaching Process and Method, and Provides Ways and Means for Physical Education Teaching to Change from Theory to Practice [2]. Research on Physical Education Teaching Mode is of Great Significance for Promoting the Implementation of Quality Education in Physical Education, Strengthening the Connection between Theory and Practice of Physical Education, Improving Teaching Quality, Promoting the Development of Physical Education Reform and Promoting the Innovation of Physical Education Teaching Mode. Based on the Network Environment, the Discussion on the Physical Education Teaching Mode is Based on the Communication Function of the Internet and the Application of Multimedia Technology to Develop Intelligent Physical Education Teaching [3]. the Research on Physical Education Teaching Mode Has Become a Key Topic in the Reform of Physical Education Teaching in Schools, But It is Not Clear in the Classification Research on the Construction of Physical Education Teaching Mode. This Problem is Directly Related to the Establishment of Physical Education Teaching Mode System [4]. the Significance of This Research Lies in the Establishment of a Relatively Reasonable Theoretical System of Physical Education Teaching Mode to Provide Services for the Reform of Physical Education Teaching in Schools.

## **2. Connotation of Developing Physical Education Based on Network Environment**

### **2.1 It Has the Function of Spreading Internet Information**

The Development of Physical Education Based on Network Environment Has the Basic Dissemination Function of Internet Information. Network Environment is a Digital Sharing System That Generates Communication According to Network Protocols. from the Perspective of Teaching, Network Environment is a Cooperative Support System That Provides Diversified Teaching Resources, Learning Materials and Tools. Its Operation Form is Information Dissemination Form [5]. Physical Education Work in Colleges and Universities Needs to Focus on Training Students' Interest in Sports and Guiding Students to Exercise Independently and Scientifically. Technology is Only a Means, Educating People is the Fundamental Purpose; the Second is "Health First" [6]. in the Traditional Teaching Environment, Physical Education is a Demonstration of Physical Form Based on the Decomposition of Human Physiological Function Activities and Actions. in This Demonstration, Teachers and Students Need Direct Contact, Which is Expressed as an Intuitive Teaching Method. the Implementation of Teaching Activities on the Network Must Pursue the Expected Teaching Results, Which is the Guide for the Operation of the Network Teaching Mode. According to China's Current Educational Policy and the General Goal of School Physical Education, China's Current Physical Education Teaching Goal is to Teach Students Sports, Health Care Knowledge and Sports Technology, Skills, Promote Health, Enhance Physical Fitness, Develop Students' Physical Quality, Cultivate Students' Sports Ability and Good Ideological and Moral Character [7]. in These Scattered and Fragmented Times, It is Undoubtedly the Best Way to Embody the Advantages of Network Teaching to Enable Students to Develop the Goal of Exercising Freely.

### **2.2 Have the Advantage of Multimedia Technology**

The development of physical education based on network environment has the advantage of using multimedia technology. The promotion of each sport requires corresponding equipment and venues. For example, basketball sports include basketball and basketball courts, and track and field competitions require javelins, protective frames and track and field events. In the process of physical education, teachers, computers and students have formed a special teaching relationship. In such a teaching environment, teachers and students have formed a new teaching mode and teacher-student relationship with computer network as a medium. Information interaction is the communication between human body's language and body. Physical education based on network environment has the advantages of multimedia technology. It can integrate the acquisition, storage and application of physical education information, comprehensively process and control it in the form of information flow, and act on students' senses in the virtual teaching environment [8]. Compared with traditional sports, e-sports is a competitive sports game with information technology as the core hardware and software equipment, virtual environment created by information technology as the venue and unified competition rules. Through the hypertext link of multimedia technology, an electronic teaching environment is created in the form of operating commands in real time and flexibly, which is manifested in the compound media means of teaching characters, sounds, graphics, etc.

## **3. Classification of Physical Education Teaching Models**

### **3.1 According to the Implication of Modern Educational Theory Classification**

The physical education teaching mode contains advanced educational theories, educational thoughts and educational concepts, which are the core of the physical education teaching mode [9]. According to its content, the teaching strategy with the research characteristics of this model is constructed. This reflects the unique characteristics of physical education teaching mode. This requires us not only to transplant other teaching modes into sports disciplines, but also not to act blindly in the application of sports teaching modes and to consider the uniqueness of sports teaching

modes. It should be said that the application of modern education theory in physical education reflects the talent view, quality view, advanced teaching thought and teaching theory of current school education, which also reflects the quality benefit view pursued by the institute of physical education teaching mode in our country [10]. Its main teaching methods include teachers' language application, explanation and demonstration, program teaching, teaching content integrity and decomposition methods, and arrangement of exercise quantity and exercise density in accordance with human physiological laws. However, the classified teaching mode fully takes into account the individual differences of different students, starting from the interests and hobbies of the students, makes the students become the main body of the classroom, stimulates their interests, and gives the students greater freedom of choice. Domestic transmission and acceptance, self-study guidance, guiding discovery, demonstration and imitation, collective teaching, clubs, etc. Highlights the themes of contemporary education thoughts, such as quality education thoughts such as facing all students, students as the main body, personality development, harmonious development, creative education, development ability, etc.

### **3.2 According to the Classification of Physical Education Teaching Objectives**

The goal of physical education has undergone a historical evolution. Before the 1970s, it was mainly to impart technology to strengthen physical fitness. In the 1970s, it put forward the idea of paying equal attention to learning technology, skills and strengthening physical fitness. In the early 1980s, it attached importance to the cultivation of students' abilities. In the 1990s, it put forward the overall educational concept of synchronous development of knowledge, ability and quality. If a physical education teaching mode is not operational enough to be applied to any physical education teaching practice, then such a physical education teaching mode has no use value and can only be replaced by a more advanced teaching mode. The goal of physical education teaching mode has also changed, and this change is more and more reflected in the goal requirement of training talents. The goal theory in establishing the physical education teaching mode embodies a multi-dimensional concept, but in the actual application process, it has obvious emphasis, that is, it is in line with the teaching practice to highlight a certain goal in a class. The teaching mode mainly focuses on physical exercise and physical quality development, such as developing sports ability, directional teaching and prescription teaching. Teaching modes that mainly teach sports knowledge, technology and skills, such as teacher teaching, self-study counseling, guided discovery, procedural teaching, etc. From the traditional teaching goal of exercising physical quality to the comprehensive teaching goal of focusing on physical and psychological quality. In terms of teaching mode, teachers are the main mode of imparting knowledge, skills and skills in physical education at first, and then there are self-study, happy teaching and situational teaching modes. Physical education teaching mode mainly focuses on cultivating students' physical ability, such as thinking teaching, mastering teaching (target evaluation), procedure teaching, example teaching, discovery teaching, cooperative teaching, etc.

### **3.3 According to the Teaching Organization Form Classification**

The establishment of sports teaching mode system is of great guiding significance for deepening the teaching reform. Judging from the current situation of research on sports teaching mode, different characteristic mode groups reflect the guiding ideology of constructing sports teaching mode and also reflect the teaching strategies. Because any teaching mode, including physical education teaching mode, if there is no stability, it will be shelved because it cannot be operated. The stability of physical education teaching mode is relative, not absolute. According to the teaching organization, the classification includes: collective learning mode, such as small group teaching, large physical education teaching, group teaching, class teaching, etc. Individualized learning modes, such as autonomous teaching, interactive teaching, individualized guidance, strategy teaching, etc. Cooperative learning mode, such as teacher-student cooperative teaching, group cooperative teaching, etc. Club teaching mode, such as in-class club mode, out-of-class club mode, in-class and out-of-class combination club mode. In-class and out-of-class integration mode, such as in-class and out-of-class integration, teaching and out-of-class activities and social

integration, school and social integration. In-class and out-of-class integrated teaching mode, such as in-class and out-of-class integration, teaching and out-of-class activities and social integration, school and social integration. According to the classification of teaching organization form, it is actually based on the change of sports organization structure, reflecting the renewal of modern sports education concepts and the penetration of modern education ideas.

### **3.4 According to the Classification of Physical Education Teaching Methods**

Teaching mode is regarded as the medium and bridge of teaching process and teaching method, and the way and method of transforming educational theory into teaching practice. The optimization of teaching methods is a feature of the research on physical education teaching mode. Teaching methods are an important element of physical education teaching mode according to certain theoretical guidance and reasonable combination according to certain teaching objectives to give full play to the overall function and comprehensive effect of the physical education teaching method system. According to the classification of physical education teaching methods, it specifically includes: the use of modern educational technology learning models, such as audio-visual teaching, computer-aided teaching, online teaching, courseware teaching (CAI) appreciation teaching, etc. Interactive learning mode, such as discussion method, conversation method, cooperative method, learning and guiding teaching method, etc. Strategic learning modes, such as discovery, suggestion, inspiration and inquiry. Autonomous learning modes, such as competition, games, simulated environment teaching, live experience, etc. Discussion teaching mode, such as observation and discussion method, collective learning method, cooperative teaching method, etc. Under the current environment, the educational model shows a trend of diversified development. We cannot only pay attention to the continuous development of the teaching model, but more importantly, we must formulate a teaching model that conforms to the actual situation. We must plan the teaching model rationally according to the different teaching resources, teaching tasks and teaching objectives of each school and based on the actual teaching situation of this school. Only in this way can we formulate a teaching model that conforms to the cognitive level of students.

## **4. Application of Physical Education Teaching Mode in Network Environment**

### **4.1 According to the Objective of Physical Education, the Educational Theory is Selected to Determine the Starting Point**

The formation of modern educational theories has the background of educational development, and each educational theory formation is the result of its own educational practice. These theories have universality and limitation of application. This requires us to neither copy nor violate the basic principles of educational theory. Only by creatively combining educational theory with physical education teaching practice can scientific achievements be formed. The construction of physical education teaching resources based on network environment should give full play to the advantages of network distance teaching, so as to promote students to truly acquire useful and up-to-date knowledge. After excluding the factor of poor practicability of the physical education teaching mode, the overall reason for the single mode in actual physical education teaching is that there is no comprehensive selection and application of the physical education teaching mode. In terms of the effectiveness of teaching resources to meet knowledge, resource organizers should fully study the actual needs of students, for example, health care knowledge about sports rarely appears as a focus in sports textbooks, while online teaching resources organizations should make necessary supplements. Only in this way can the theoretical results of the research be valuable and recognized by everyone. Therefore, the research of physical education teaching mode should choose the type of teaching mode properly, which should not only select the starting point, but also make new and original ideas to serve the physical education teaching practice.

### **4.2 Grasp the Framework of Physical Education Teaching Mode**

Any excellent physical education teaching model must contain not only modern educational

theories, but also teaching objectives, procedures, methods and means of model operation, environment of model operation, and evaluation system of model operation effect. These are the basic elements for us to set up a physical education teaching model. Moreover, from the characteristics of the research on modern physical education teaching mode, it has the characteristics of multi-dimension, openness, operability, effectiveness, stability, integrity and comprehensiveness. For example, teachers can use computers to make electronic automatic scoring forms for physical education teaching, so as to realize intelligent management of students' scores. The content of this form should not only include students' various sports scores, but also automatically generate all-round evaluation contents such as average score, total score, grade, qualified rate, and compliance rate. In fact, the selection of teaching mode for PE teachers must be clear: there is no one PE teaching mode that can effectively adapt to each student or successfully achieve all teaching objectives, that is, a certain PE teaching mode has its unique function and scope of use. Physical education teaching mode also has guiding function, widening function, educational function, target function, evaluation function and benefit function. A good grasp of the elements, characteristics and functions of the research on physical education teaching mode is one of the preconditions for us to engage in the experimental research on physical education teaching mode.

### **4.3 Comprehensive Application of Physical Education Teaching Mode**

On the whole, the research on physical education teaching mode has two aspects: theoretical function and practical function. Due to the requirements of implementing quality education, many education experts and scholars have more comprehensive thinking. In the teaching practice of physical education, teachers can give full play to the teaching function of each mode and meet the different needs of students, society and teaching content only by comprehensively applying these teaching modes. On the one hand, we should actively realize the selection of teaching methods, such as aerobics teaching in physical education curriculum, which is demonstrated by teachers and followed by students in traditional physical education teaching. On the other hand, network sports teaching can use multimedia technology to flexibly design course content. For example, the audio-visual teaching content can be spatially adjusted, and teachers can combine with photographic equipment to grasp and fear the body features and movement tracks of objects or human bodies in motion from different angles in all directions, so as to optimize the teaching effect. Of course, we do not deny that a single teaching goal can have multiple teaching models corresponding to it, nor do we exclude that a single teaching model can achieve multiple teaching goals. However, the teaching model of "one model is universal" is popular but unrealistic. The teaching mode is specific, targeted and limited. We must first consider the physical education teaching objectives and determine the evaluation methods. Secondly, we should choose which teaching mode from the comprehensive consideration of the class type, objectives, objects, contents, conditions and environment. In addition, we should design the application program of the teaching mode. In terms of a class, it reflects the interdependence and interaction between the various elements of the physical education teaching mode, forming a complete system.

## **5. Conclusion**

At present, college physical education is increasingly integrated with the rapidly developing computer network. The network environment has brought profound influence on college physical education teaching modes and methods, which means new challenges to schools, teachers, students and other related subjects. It should be pointed out that we are not studying the physical education teaching mode for the sake of the mode. The ultimate destination of the physical education teaching mode is to apply it to the physical education teaching practice, which is the source of its vitality. Teachers should analyze students' comprehensive learning situation based on the dynamic development of students' learning achievements, and attach importance to the process of physical education instead of single results. All the variables in the teaching process are brought into a unified category, the teaching process is systematically and dynamically analyzed, and the best way to achieve the teaching goal is found in the favorable connection of all the variables. The

classification of PE teaching modes provides a certain guarantee for successful PE teaching, which is conducive to improving the quality of PE teaching, promoting the development of school PE and better improving the health quality of students.

## References

- [1] Villalba A, M.D. González-Rivera, B. Díaz-Pulido. (2017). Obstacles perceived by physical education teachers to integrating ICT[J]. Turkish Online Journal of Educational Technology - TOJET, vol. 16, no. 1, pp. 83-92.
- [2] Hutzler Y, Barak S. (2017). Self-efficacy of physical education teachers in including students with cerebral palsy in their classes[J]. Research in developmental disabilities, vol. 68, pp. 52-65.
- [3] Kwon E H, Block M E. (2017). Implementing the adapted physical education E-learning program into physical education teacher education program[J]. Res Dev Disabil, vol. 69, pp. 18-29.
- [4] Lagestad Pal. (2017). Longitudinal changes and predictors of adolescents enjoyment in physical education[J]. International Journal of Educational Administration & Policy Studies, vol. 9, no. 9, pp. 124-133.
- [5] Salimin N, Shahril M I, Jani J, et al. (2017). Development Assessment Instrument for Basic Skills of Invasion in Physical Education[J]. Journal of Computational and Theoretical Nanoscience, vol. 23, no. 1, pp. 386-389.
- [6] Zhu Tao. (2017). High school sports classification teaching model [J]. Urban Family Education Monthly, no. 10, pp. 193-193.
- [7] Gao De. (2017). Discussion on classified teaching mode of high school physical education [J]. New campus (middle ten days), no. 2, pp. 77-77.
- [8] Ju Baishan. (2018). Research on the Application of Classified Teaching Mode in High School Physical Education [J]. Times Education, no. 2, pp. 87-87.
- [9] Wang Ao. (2018). High School Physical Education Teaching Status and Practical Research on Classified Option Teaching Mode [J]. New Curriculum, no. 21, pp. 34-35.
- [10] Lu Jian. (2017). Association between Classification Model and High School Physical Education [J]. New Wisdom, no. 6, pp. 82-83.