Application of Computer Assisted Instruction in P.E.Teaching

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Abstract: Computer-Aided Instruction is one of the hot topics in the industry. Although various regions, colleges, and sports-related majors are applying this teaching method to a greater or lesser extent, there are still large gaps in ideas, methods, and management. Therefore, this article focuses on the application of computer-assisted instruction in physical education teaching to address the above issues. First, the role of computer-assisted instruction in college physical education is revealed from three different aspects. Second, the essential factors of the application and promotion of computer-assisted instruction are briefly analyzed around four main aspects. Dimensions elaborate the application methods of computer-assisted instruction in physical education. Through the demonstration, I believe that some of the problems that plague physical education teaching workers can be partially solved.

1 Introduction

Computer Assisted Instruction refers to the use of computers as a means of assisting teaching, and through the study of audiences and computers through Unicom, so as to achieve a strong interactivity, high degree of relevance, a good sense of attachment. Computer-Assisted Instruction has emerged with the rise of modern educational teaching concepts, and its purpose is to better improve the quality of teaching. In comparison, computer-assisted instruction has functions and characteristics not available in traditional classroom teaching. On the one hand, computer-assisted instruction presents a more intuitive image, which can reproduce the scene, which is easy for students to accept; on the other hand, computer-assisted instruction can stimulate students' enthusiasm for learning and grasp the abstract concepts and virtual affairs more accurately. Therefore, computer-assisted teaching can be considered as one of the important achievements of college physical education teaching reform in the 21st century[1].

Looking at the actual work situation, the application of computer-assisted instruction in physical education teaching covers two main scenarios. One scenario is the theoretical teaching in an indoor classroom, also called a theory class, and the other scenario is outdoor sports training. Called exercise class. Due to the objective existence of various uncertain factors, the application of computer-assisted instruction is difficult. At present, computer-aided instruction mainly appears in the form of playing short videos and demonstrating technical actions. Therefore, it is necessary to research deeply, actively expand, and bravely try new application methods and strategies of computer-assisted instruction.

2 The Role of Computer-Assisted Instruction in College Physical Education

2.1 The Role of Computer Aided Instruction in Sports Training

Outdoor sports training courses often have some standard technical movements, such as: fast lateral movement footwork, balance vacation, stable rotation, etc. In order to ensure the accuracy and stability of technical movements and avoid wrong demonstrations, teachers are in the process of demonstration All of them need to slow down the pace, decompose movements, and demonstrate repeatedly. However, some instantaneous movements cannot be fixed. In other words, teachers cannot stop a certain movement for students to repeatedly study and observe[2]. Therefore, in order to

help students form the correct movement appearance, to quickly understand the essentials of movement, and to proficiently land the movement specifications as soon as possible, teachers began to consciously use computers to assist teaching.

2.2 The Role of Computer-Assisted Instruction in Theoretical Learning

Indoor theoretical teaching is an important unit of physical education teaching, and it is a place where students receive systematic knowledge learning in the classroom. However, the traditional teaching methods of efficient physical education are all "one-way" transfer. Teachers and students lack the necessary interaction, and students have a weak sense of autonomous learning. Through the introduction of computer-assisted teaching methods, action playback at different rates, interactive presentation of video animation, and vivid interpretation of teachers' teaching ideas and teaching ideas are realized. From a practical point of view, computer-assisted instruction improves the interactivity of teaching, increases the amount of information taught, reduces the knowledge difficulties in professors, and creates a better learning atmosphere.

2.3 The Role of Computer Aided Instruction in Teaching Reform

In the new period, college physical education and teaching pay more attention to the cultivation of students' physical and mental health. In order to achieve this goal, it may be difficult to rely on traditional education and teaching methods. With the aid of computer-assisted teaching methods, it has helped college physical education to realize the "three-in-one", that is, "learning of knowledge system + cultivation of practical ability + cultivation of hobbies and hobbies", which truly achieves the purpose of entertaining. According to incomplete statistics: After the introduction of computer-aided teaching in physical education in colleges and universities, the needs of a wider group of students have been met, and preset teaching goals and teaching plans have been improved to varying degrees.

3 Analysis of the Necessary Factors in the Application and Promotion of Computer Aided Instruction

3.1 Physical Education Teachers Should Clearly Define Their Mission

First, physical education teachers must always keep in mind their work content and responsibilities requirements, stick to the bottom line of professional ethics, and do what they love; secondly, physical education teachers must always clarify their work positioning and direction and follow the pace of national education reform Progress is neither blindly arrogant nor pessimistic; again, physical education teachers must stick to their original intentions, be good at self-growth, be willing to learn and improve, dare to try and make mistakes, and be calm and pure. Only in this way can the trainer team have sufficient tenacity and combat effectiveness.

3.2 To Build Computer Knowledge Learning Platform

In order to make good use of the tool of computer-assisted instruction, colleges and universities must have a long-term plan. Because it involves interdisciplinary learning, there are indeed great difficulties. Therefore, it is necessary to formulate a learning process that meets the requirements of teaching, open a series of practical computer operation skills courses, popularize the operating procedures of related application software, and finally realize the comprehensive improvement of teaching soft power.

3.3 To Increase the Necessary Investment in Physical Education

Computer-aided instruction requires a certain amount of investment, from hardware purchases to software supplements. On the one hand, a high-informatization, high-tech, and high-level "three high" faculty team should be gradually created; on the other hand, a number of places that can meet the requirements of information-based teaching should be built, expanded, and rebuilt. Only by putting in place can the effect of computer-assisted instruction be guaranteed.

3.4 All Employees Must Establish a Sense of Innovation and Change

The entire staff includes all middle- and senior-level managers in the academy, front-line sports education and teaching practitioners, and various types of supporting teams or units of external cooperation. In today's fast-changing world, all personnel take computer-assisted instruction as a new proposition, increase research intensity, expand the scope of thinking, and break through self-limitations. Only when innovation is truly incorporated into the bloodstream, it is possible to do something new in the exclusive field.

4 Application of Computer-Assisted Instruction in Physical Education

4.1 New Application Concepts of Computer-Assisted Instruction

Although the word "assistance" is used in computer-assisted teaching, it is definitely not optional, and it is definitely not limited to teaching. In contrast, computer-assisted instruction needs a new definition and cognition in the new era[3]. Specifically, it includes: First, computer-assisted instruction should act as a "siege weapon". Computer-assisted instruction should be the main force in explaining the difficult points of knowledge, and it should also play a sharp role in the transfer of important knowledge points. Second, computer-assisted instruction should strive for local "anti-customer-oriented". Computer-assisted teaching is not the largest proportion in the current overall teaching framework, but it should play a leading role in some teaching units or teaching links, so that traditional teaching becomes a "supporting role"; third, computer-assisted teaching must gradually become "Mobile library"[4].With the growth of the computer-assisted teaching knowledge base, and with the rapid development of computer technology, knowledge-intensive centers such as mobile terminals, virtual scenes, and centralized teaching centers must penetrate into the lives of audiences and realize the "non-classroom" of physical education Teaching.

4.2 New Ideas for the Application of Computer-Assisted Instruction

From the traditional operation point of view, most colleges and universities have just "embedded" computer teaching methods into the traditional curriculum system. The reform is nothing more than the teaching content of teaching units or the teaching methods of difficult points. There is no room for better results.

The new ideas for the application of computer-aided teaching should be implemented from the following aspects: First, computer-aided teaching should be incorporated into the pre-management system. The so-called pre-management system refers to the pre-class learning stage, and online The learning form uses fragmented time, and key segments are cut out by the teacher in advance and pushed through online platforms or WeChat groups, so as to achieve the pre-learning tasks. Second, computer-assisted teaching can be used as an important tool for learning achievement test The traditional memorization assessment of sports theory knowledge points is gradually transformed into a scene reproduction assessment of computer presentation content, using picture descriptions, multi-dimensional disassembly, and other methods to comprehensively assess the students' mastery; third, the computer Auxiliary teaching authority is delegated to the student audience to realize the transfer of teaching roles[5]. By flipping the classroom, students' enthusiasm for developing related auxiliary learning tools is reduced, the energy loss of outsourcing purchases and independent research and development is reduced, and the maximum internal motivation of teaching is achieved.

4.3 New Planning for the Application of Computer-Assisted Instruction

The smooth, efficient, and sustainable implementation of computer-assisted teaching is inseparable from the overall planning of this work. Among them, which new planning solutions can be used to effectively solve the core problems existing in teaching, which should cause us sufficient thought. And attention. Combining with the actual experience of the work, the following points are proposed: First, do a good job of planning the timeline before teaching[6]. The timeline referred to here is not a time interval in terms of semesters as traditionally understood, but a growth timeline based on individual student big data. By straightening out the differences and commonalities of the

timeline, a highly targeted teaching plan is formulated. Second, special attention must be paid to closing the teaching end. The closing reference here is not the final exam or phased summary in general understanding, but the connection between succession, succession, and succession. It is necessary to check for defects in the previous phase of work, and to improve Work on a comprehensive plan to reduce unnecessary losses; third, always pay attention to the iterative upgrade of computer technology. In the case of relatively limited funds, technology, environment and other factors, we cannot reduce our attention to new technologies. We must actively upgrade the software within an affordable range, optimize the system configuration level, and integrate the individual students after the 00s. Characteristics, timely adjustment of direction and form, in order to achieve the best teaching results.

4.4 New Strategies for the Application of Computer-Assisted Instruction

If computer-assisted instruction is to be more effective, new and bold attempts need to be made on the ground. Here, we divide the application strategy into three scenarios according to the "management closed loop" model: first, computer-assisted instruction must be rooted in the preparatory stage of the teaching teacher group; second, computer-assisted instruction must be implemented in the audience student group The actual teaching stage; the third is that computer-assisted teaching should be integrated into the comprehensive management assessment system. Specifically:

First, computer-aided teaching should be rooted in the preparatory stage of the teaching teacher group, which means that the development of computer-aided teaching must first be traced to the self-development of the school team. At the same time, it is said that computer-aided teaching should be embedded in the course With sufficient pre-class preparation, physical education teachers can truly use this new teaching method freely. Secondly, computer-assisted instruction must be implemented in the actual teaching stage of the audience and student groups, which means that computer-assisted instruction must be hierarchical. In the course of teaching, it is divided into categories, ages, and stages. The so-called hierarchical level is to distinguish between professional and non-professional. The so-called sub-category is to distinguish between gifted and non-talented. The so-called age is to Considering the differences in individual life cycles, the so-called stage is to grasp the succession of time nodes.

5 Conclusion

The many advantages of computer-aided teaching methods can indeed help PE teachers improve the quality of teaching[7]. Compared with the experience and effectiveness of using information-based teaching methods in other disciplines, the adoption of computer-aided teaching in physical education is relatively late, but it also means that There is huge upside. With the country's continuous strengthening of the reform of sports for all, healthy living and education, sports disciplines will adopt more new and better teaching methods to achieve a comprehensive and qualitative improvement in the level of physical education.

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