Research on the Construction of Computer Information Technology Curriculum System for Physical Education Major

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Abstract. With the development and popularization of information technology, all walks of life has been inseparable from information technology. This means that all majors in colleges and universities must have information awareness and information capabilities. In order to strengthen the employment rate of sports majors and meet the development needs of the society, it is necessary to strengthen the application of information technology courses in sports majors.

Keywords: Sports Information Technology, Knowledge, Ability, Curriculum System, Physical Education Major

1. Introduction
With the progress of the times, the construction of physical education information technology curriculum system needs to consider the needs of social development. In this way, colleges and universities can cultivate high-quality talents. However, training high-quality talents requires a new curriculum system, teaching content and methods. Colleges and universities need to integrate the information technology curriculum system into the teaching model [1].

2. The development status of sports information technology courses in domestic sports colleges
In recent years, some sports colleges and universities in our country have opened the major of Educational Technology (Sports Information Technology). This major is an emerging major that is formed in the context of the development of information communication theory and technology. Schools are in its infancy, and the enrollment scale (number) is small; most sports colleges do not offer this major, and the relevant courses offered are mainly basic operation courses such as "Computer Basics" and "Modern Educational Technology Application". The teaching content of these courses is mainly to enable students to master basic computer operation ability and basic information technology literacy, and cannot be more closely integrated with sports events, which is not conducive to the training of sports technical talents [2].

3. Analysis of the establishment of educational technology (sports information technology) major
The rapid development of information technology represented by computers has promoted the progress of sports technology, which has also led to an increasing demand for technical talents in the sports field.
| College training direction | Required ability | Employment direction |
|----------------------------|------------------|----------------------|
| Sports Information Technology | Cultivate the comprehensive development of morality, intelligence, physical education, art and labor, possess the comprehensive qualities of information talents, and master the basic theories and professional knowledge of education technology and information technology | Competent applied talents and basic skills for information technology work in sports institutions, schools, enterprises, institutions and other related departments at all levels |
| Digital media technology direction | Cultivate basic theories of educational technology and basic knowledge of physical education, proficiency in network technology or relevant skills related to multimedia technology | A compound talent who can be engaged in the development and communication of sports-related digital media in the fields of teaching, training, competition, entertainment and advertising |

It is precisely in response to this market demand that some sports colleges and universities in my country have begun to open the education technology (sports information technology direction) major. This major takes education technology as the research object and is one of the researches on the theory of the application of education technology in educational activities.

1) Training goals. Some domestic colleges and universities often have multiple majors in a major, and students can choose according to their own interests, needs and foundation. It can be seen from Table 1 that the current educational technology majors offered by sports colleges and universities have also set up two professional directions, namely the direction of sports information technology and the direction of sports digital media. The author believes that it is feasible to train educational technology professionals in different directions. Under this major, different professional directions can be set according to the cultivation of students' interests and expertise and the improvement of students' comprehensive ability, practicality, sufficiency, and employment needs, so that the quality of training can be improved to another level. However, compared with other types of colleges and universities, the number of professional directions set is still small. According to statistics, there are currently 13 professional directions set up by modern education technology based on employment directions. It is not difficult to see that the current physical education colleges in my country Educational technical talents are mainly teaching personnel and technical support personnel [3]. Among them, the three schools of Wuti, Tianti, and Shanti cultivate talents with equal emphasis on teaching staff and technical support personnel. Only the Shenyang Institute of Physical Education focuses on training technical support personnel. The author believes that educational technology is not a simple piece of education and technology, nor can it be equally important in professionalism, otherwise the result will only be an embarrassing situation where professional students "learn everything but not master everything".

Table 1. Summary of the training objectives of the education technology major in sports colleges in our country

2) According to the training goals of the sports information technology course, combined with the relationship between the various ability elements, the 25 ability elements are divided for the first time; on the basis of visiting relevant experts and scholars, the elements are added or removed, and the physical education major is finally determined [4]. The 21 elements that should be included in the
| Capability structure module                                           | Capability structure elements                                                                                                                                 |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Information Technology Ability in Physical Education Teaching       | The ability to collect and produce sports materials; the ability to compile electronic teaching plans; the ability to make multimedia courseware; the ability to manage sports performance and statistics; the ability to use the lesson preparation database |
| Information Technology Ability in Training and Competition Organization | Training plan formulation ability; training data collection and management ability; sports technical and tactical analysis ability; the establishment of athlete archives; the statistics of game live data; the application and development of competition scheduling software; the production and use of sand table; the statistics and analysis of competition results |
| Information Technology Ability in Sports Management                 | Course scheduling system application and management ability; data (information) database management ability; field equipment intelligent management; website information update and maintenance |
| Information Technology Ability in Sports Scientific Research        | Paper layout construction; scientific research data collection and statistical analysis; reference data retrieval ability; graph production and editing ability |

structure of sports information technology capabilities that undergraduate students should have are shown in Table 2.

**Table 2.** The structural elements of sports information technology ability of physical education majors

### 4. Development opportunities and challenges of information technology courses

#### 4.1. Go all out, opportunities and challenges coexist

Information technology courses have not been taken seriously by universities, but with the advent of new curriculum reforms, teachers in front-line teaching have brought new opportunities, making it more convenient for many young teachers in our country to teach, and teaching information technology courses The development of education brings great opportunities." Especially in the transformation of educational concepts based on the knowledge economy, the concepts of teachers and students are constantly adapting to the development needs of society, and they are fully aware of the development of education brought by information technology The special significance of the coming has allowed the corresponding development of information technology teaching [5]. Therefore, under such a knowledge economy background, we need to seize the opportunity in time and construct a corresponding classroom model so that students can love information technology more.

#### 4.2. Strengthen the construction of information technology education environment

The use of e-learning classrooms and projections of Polarware brings students into the Internet. Through students logging in to the campus network, they can understand and use the resources in the school, so that students can learn courses through the Internet, so that the effect of classroom teaching can be obtained. Great improvement. In addition, by introducing the online teaching platform into the teaching mode, teachers can fully demonstrate the teaching arrangement of each class, and students can also fully understand the tasks in the course by referring to the corresponding course arrangement, so that Students can know in advance that the teacher will explain the knowledge in the course, which improves the quality of teaching [6].

### 5. Integration of information technology and physical education

With the introduction of multimedia information technology into the teaching mode, teachers can continue to innovate teaching methods and greatly promote the reform of chat education. The various
language and text information of information technology makes the teaching content more intuitive and comprehensive. Shown in front of students, it mobilizes students' enthusiasm for learning, and improves teachers' teaching quality.

5.1. Animation teaching mode
The teaching content is fully displayed by means of graphics movement and color transformation in information technology. Use the corresponding PPT and Flash to fully combine the text information and picture information to be expressed in the teaching content with 3D animation, which strengthens the students’ comprehension ability and enables students to fully understand the corresponding action essentials. Perform in-depth analysis. Specific operations such as these can greatly improve the quality of teaching. If students cannot see the truly standardized movements, they can only imagine through the teacher’s explanations [7]. It is a very long process to learn the movements, allowing students to make To learn the correct actions through the courseware, the teaching effect can be doubled with half the effort, so that the enthusiasm of students in learning has been greatly mobilized, and it has a great help to the development potential of students.

5.2. Hierarchical display
Through the video and audio technology in the information technology, the teaching content is displayed in layers, so that students can learn from the shallower to the deeper, and the knowledge and actions learned by the students are more systematic. By explaining the corresponding action, the corresponding knowledge content in the action is divided into levels and displayed in front of the students so that the students can understand the essentials and key points of the action more intuitively and theoretically. The corresponding knowledge content is divided into levels and displayed in front of students so that students can more intuitively and theoretically understand the essentials and keys of the action.

5.3. Make physical education more vivid and vivid through the explanation of information technology
In physical education, explanation and demonstration are the two cores. When explaining the action, the teacher should not only be concise, but also explain through the corresponding professional terms and corresponding formulas, so that some technical essentials in the action can be fully expressed [4]. Therefore, teachers should fully understand the teaching materials and explain the key and difficult points in the teaching materials [8]. Using information technology to analyze and explain actions will make the corresponding actions more intuitive, and under the unique animation technology and audio effects of information technology, students can be as immersive as they are, and learn about the corresponding actions. Master more deeply.

6. The advantages brought by the construction of the sports information technology curriculum system for the physical education major

6.1. Use information technology to stimulate students' interest in learning
In order to make the classroom atmosphere more passionate, it is necessary to completely change the previous teaching mode and introduce information technology into teaching. In teaching, use multimedia to increase students’ interest in learning, stimulate students’ curiosity for learning, and pass information While technology delivers teaching content, it also adjusts the atmosphere of the classroom and stimulates students' interest in learning.

6.2. Use information technology to improve classroom efficiency
Through information technology, students can clarify the task of learning [9]. Through vivid simulation demonstrations, they can fully combine theoretical knowledge and action exercises, which improves the time utilization rate in corresponding training and enables students to understand the content and methods of teaching. Having a deep understanding also allows students to establish the correct concept of action, and allows students to fully mobilize their subjective initiative. Through the guidance of the
As teachers grow older, they become more comfortable and insufficient in demonstrating some actions, and some difficult to demonstrate and technical actions become difficult to explain, making it impossible for students to establish a complete image of actions. With the introduction of information technology, the teaching content has become more visualized, strengthened the students' understanding ability, and laid a good foundation for the future development of students [10]. teacher and the students watching the courseware, the essentials are repeatedly practiced and the difficulties are resolved, so that the efficiency of classroom teaching has been greatly improved.

6.3. Use information technology to enhance teaching effects

7. Conclusion

The information technology curriculum system makes the physical education curriculum more comprehensive. It cultivates the information awareness and information ability of sports students, and it can cultivate the comprehensive application ability while emphasizing the connection between courses, so it laid the foundation for the adjustment of the next teaching plan and teaching reform.

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