Exploration of the Application of Big Data in University Sports Education

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Abstract: Under the background of rapid development of information data, all social work is deeply influenced by big data, as is the university sports education. The new environment of education created by big data has brought no small impact to the sports education of universities. University sports education must take advantage of big data to develop smoothly. With the help of big data technology, colleges and universities can combine the development needs of students and the essential characteristics of sports education to explore new education approaches. Therefore, this paper mainly studies the practical application of big data in university sports education.

1. Introduction

In today's social environment and education environment, we can only pursue development by following the trend of environmental development, focusing on technologies affecting social development and taking the initiative in combination with our own development needs. As far as college sports education is concerned, the impact of big data on college sports education work cannot be ignored. It includes both positive and negative effects. If colleges and universities cannot build up the data consciousness of sports education with new ideas and new perspectives, and explore the new education model and system, they will fall behind the trend of education. In order to accelerate the modernization process of university sports education, the following will discuss the practical exploration of big data in university sports education from different perspectives [1].

2. Influence of big data on college sports education

From the demand analysis of physical education in colleges and universities present development, under the rapid development of information technology, network technology, big data has become the pronoun of modern society, and big data to society of each industry has extensive and profound influence, and the impact is already in the same time into the university sports education, the school education work, teachers and students' life and development has important influence, it's safe to say today's colleges and universities sports education without large data. On the one hand, big data is a product of technology with The Times, when information is accumulated to a certain degree, large data can develop, apply it to the sports education in colleges and universities, is advantageous for the university sports education smoothly information acquisition, processing and application, to facilitate students' growth and development, to the diversification of physical education in colleges and universities also offer another possibility, meet the demand of the development of the school sports education research [2]. On the other hand, as a feature of this era, big data is not only an advanced technology, but also a method and concept. The application of big data to education of college sports can help teachers and students acquire new knowledge and create new value in sports activities. In addition, with the continuous reform of education, various branches teaching work must innovate their concepts of education, explore new education mode and approach, the relevant institutions, education system and school education leadership, must be constantly reform means of updating method, but the implementation of the reform needs to refer to the advanced technology, need to rely on a large amount of data, while big data can give the above unit of education reform work besides education samples of all the data, lay the foundation for all the innovation work.

From a long-term perspective, in the future, big data will definitely have a long-term impact on

various industries in society and education work. Under the influence of society, the requirement of the students in colleges and universities sports education will be higher, as the previous sports education in colleges and universities work from one-way data, partial data, with the help of the known knowledge and experience of some aspect of physical education study, but this way of education or research speed cannot satisfy the high requirements of the large data environment of sports education, under the impetus of the big data, and the broad masses of sports scientific research workers in colleges and universities must use big data technology, the current situation of physical education in colleges and universities further research and development, must from the data of comprehensive, system, effectively promote the long-term development of university sports education [3].

3. Research status of education in college sports

Education is an academic activities, physical education is under the teacher's effective guidance and organization, through certain environment of sports activities, with the aid of certain methods and means, enable students to master relevant sports knowledge and skills, and good moral quality, improve the sport ability of body, a kind of education process. In the process of the education, teaching and research is one of the essential link, through the analysis and solve the relevant problems existing in the sports teaching, with the aid of certain education theory, education experience and research methods, from the system, clutter found the regularity of sports education in daily teaching, and eventually promote the sports education quality improvement. In recent years, colleges and universities in China have paid more and more attention to physical education, and the research on physical education is more comprehensive and in-depth. However, there are still some problems, which are embodied in the following aspects:

Problems:

First, affected by traditional education concept, education mode, colleges and universities sports teaching research work is not very good to adapt to the development and requirements of big data environment, the research theory and the research method is also relatively lag, single, more tend to be the best method in terms of teaching methods, for example, does not pay attention to the empirical research, bigger to the dependence of the case in the process of research, research institute with the source of data also is more and questionnaire and interview, so the scientific nature, objectivity and accuracy of the results cannot be guaranteed [4].

Secondly, the lack of innovation of the research makes it difficult to have an accurate grasp of the future development direction and trend of university sports education.

Development:

First, under the influence of big data environment, more and more universities begin to attach importance to physical education, is also more active on the study of sports teaching scientific and scholarly, most of the physical education teachers in colleges and universities can treat every day with professional point of view and the academic level of sports teaching, can consciously abide by in the daily teaching and research process of scientific and correct study method, make the research of physical education teaching work more and more standardized, academic, physical education teaching quality has been significantly improve.

Secondly, the professional acuity of college PE teachers has also been improved, which can be viewed from the professional perspective of the problems in PE teaching by Zhou Minghua. To some extent, it has improved the level of college PE teaching.

4. Practical analysis of big data in university sports education

4.1 Establish data awareness based on big data

Big data has a wide and profound impact on various industries in society because of its four advantages: wide data types and large data volume, high value after data purification, fast data processing speed and strong real-time performance. Based on the big data of these four

characteristics, it can comprehensively provide comprehensive and high-value data for the physical education activities of colleges and universities, which is convenient for them to adjust their teaching strategies accordingly, and also convenient for the sports researchers to analyze and find out the rules of physical education, so as to build up a new teaching system. Plus in recent years, the sensor technology, Internet technology and mobile technologies are rapidly developing, with the support of these technologies, micro courses, MOOC, SOPC and began to walk into the classroom, teachers and students in using these online courses teaching and learning, can produce a large amount of data, including the operating data, attendance data, test data such as traditional learning data, including data records of students learning, life, such as the number of students learning courseware, learning materials, the length, the number of students on the Internet entertainment, length, students sharing on the network and data, search and browse pages, or subject, In addition, it also includes various body index data, position data and movement data generated by mobile terminal equipment. These data are of various types and large amount, and have great education research value after purification and consolidation. In the process of daily teaching and research, college sports workers should establish data awareness, put big data technology into sports education, and obtain teaching results from it [5].

4.2 Innovative teaching model based on big data

Big data is widely application in the university sports education, the teaching environment, on the background of big data university sports teaching mode has changed a lot, the most common physical education teaching mode, based on large data flip class, small class and for class, than traditional sports class, this several teaching modes is dominant, below for detailed analysis.

Firstly, as far as flipped classroom is concerned, it emphasizes pre-class preparation, pertinence of teaching and initiative. For better teaching, in front of the sports classroom teachers just need to arrange students to master sports knowledge and skills of using the courseware, video, etc. For full preview, in the process, according to the need to learn the knowledge of physical education teachers design teaching video, the video after the completion of the body to release it to campus network platform, website or class by students to autonomous learning, teachers according to students' learning outcomes with specific guidance, personalized training. Through this teaching mode, every student's learning needs can be satisfied, and students' enthusiasm and initiative to participate in learning activities can be fully mobilized to improve the efficiency of physical education.

Second, micro class is currently the most widely used a kind of teaching mode, although it is short time, less teaching content, but content essence, applied micro class with the advantages of physical education teaching is able to capture the attention of students in a short time, mobilize the students' interest in learning, students will not be tired because of the long video, initiative to drop, so the application of micro lesson to colleges and universities sports teaching, can effectively make up for the inadequacy of traditional sports teaching. When using micro-class for physical education, teachers should design video with strong pertinence and outstanding teaching points in combination with the content needed for teaching, so that students can gain something through video.

Finally, MOOCS is an open online course with large scale and certain application threshold. Therefore, MOOCS have not been widely used in education of college physical education. At present, only one school USES MOOCS for physical education. In general, a section of class time is 10 minutes or so, the content of the course according to the specific teaching content, students through online sports knowledge and skills relevant to the study, there is don't understand or fail to grasp, you can replay or slow down, make sure that every student can understand and see, when the students finish the classroom learning, need through the assignment to strengthen practice, after practice and the corresponding test, if the test passes, can get the related certificate [6]. Although are online classroom, but longed for class with class and flip or have more than one class differences, for example for class in a few minutes of video will automatically start after studying a and issues relevant to the topics, students will only be processed in the accurate and complete after learning, so longed for classes to learn more targeted and purposeful, study effect is higher also. In addition, compared with small class and flip the classroom, lesson for freedom and flexibility, higher,

stronger, not affected by time, space, the limitation of the number of teaching content, learning, but also because in the process of learning goal is clear, and the content of moderate difficulty, so learners in the learning process won't produce frustration, learning motivation is also higher.

Big data brings lots of opportunities to university sports education, making PE classes more selective. However, universities and PE teachers must correctly understand the importance of traditional PE classes when conducting daily physical education. They should not blindly adopt new types of classes and abandon traditional classes, which will only lead to misunderstanding of sports education. When carrying out education, colleges and universities should organically combine the traditional and new classes, so that they complement each other and better meet the needs of students to grow into talents.

4.3 Take big data as an opportunity to optimize physical education

Students and teachers are the main role in the sports teaching activity, under the influence of big data, teachers' teaching behavior and students' learning behavior should also be a corresponding change, teacher should make full use of the technology of data, make their teaching more efficient, students should also be with big data technology as an opportunity, efforts to improve themselves and improve themselves.

First, in terms of teachers, and some teachers in physical education teaching, pay attention to speak theory ignore the body language, under the background of information explosion, the teaching innovation, this way of teaching has can't meet the demand of students' learning, physical education teachers must give full play to their initiative and creative labor, should abandon is given priority to with the theory of teaching strategy, according to the teaching requirements in body language, at the same time, according to the students' learning situation action feedback to adjust teaching content effectively. In addition, after big data technology enters physical education, teachers should constantly improve themselves, so that they have the ability to collect information, analyze and apply data as a whole. They should grasp the rules of physical education and master the development trend of physical education, so as to optimize teaching strategies and methods and improve teaching efficiency. For example, teachers can collect various information data such as students' physical fitness and sports ability before class, adjust relevant teaching content and reasonably arrange teaching progress according to these teaching data.

Secondly, as far as students are concerned, information is abundant and complex under the big data technology. Students should be able to be independent in this complex data environment, have a correct understanding of sports learning, and spend their time in the right place to improve themselves.

5. Conclusion

To sum up, the impact of big data technology on college sports education is extensive and profound. Under this influence, colleges and universities must grasp the advantages of data technology and apply big data to education to improve the level of physical education.

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