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The Realistic Dilemma and Path Exploration of the Construction of Physical Education Teaching MOOCs Platform in Colleges and Universities

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Abstract: *With the widespread application of artificial intelligence and big data technology, the era of higher education informatization has come. Physical education is an important means of cultivating higher education talents, and information-based teaching methods should be in the forefront of the development of the times. However, the construction of a sports MOOCs platform is not an overnight effort, especially in the absence of sports information-based talents. This article uses literature research methods and logical deductive research methods to systematically analyze the many difficulties faced by the construction of the physical education MOOCs platform in the current actual construction of colleges and universities. The research proposes the organic combination of MOOCs and traditional physical education to improve teachers' teaching abilities and strengthening of student's supervision and assessment system are practical improvement strategies.*

Keywords: *physical education, MOOCs, higher education*

1. Introduction

Massive Open Online Courses, abbreviated as MOOC, are large-scale open online courses, which are transmitted through video as a carrier and are transmitted on the basis of the Internet, and openly conduct educational activities to the audience. This new type of education model has a profound impact on teaching. All over the world, educators have caused changes in the ideological trend of teaching reform. Physical education MOOCs with practical operation has always been the difficulty of MOOCs construction. Colleges and universities have to construct MOOCs, and the reform of physical education MOOC teaching will face many problems that need to be solved urgently. In recent years, the domestic sports market has begun to show a rising trend. Sports related practitioners have been increasing. Sports colleges and universities have expanded their enrollment year after year to meet market demand[1]. The domestic sports environment requires more high-end comprehensive talents, but the current physical education in colleges and universities is still at the stage of traditional teaching mode. The development and construction of sports MOOCs has been difficult. What problems colleges and universities will face when constructing sports MOOCs? Is it possible to find a path suitable for the construction of physical education MOOCs teaching mode?

2. Realistic dilemma in the construction of physical education teaching MOOCs platform in colleges and universities

2.1 Compilation of physical education subject knowledge graph

The prerequisite for the implementation of MOOCs is to have micro-videos, so the production of micro-videos is the primary problem facing teachers. However, the difficulty of micro-video production for sports disciplines does not lie in external technical elements such as graphics, text, sound, and images. Other disciplines also face these problems, and professional and technical personnel can effectively solve them. The difficulty in making micro-videos for sports disciplines lies in how to rationally connect and connect various knowledge points, that is, the compilation of the subject knowledge map. The MOOCs teaching in my country is a "fragmented learning method based on system design", which is different from the Western MOOCs "purely fragmented learning method" in terms of structure[2]. The fragmented learning method is that students learn piecemeal knowledge

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points through micro-video, but physical education teaching is targeted, planned, and organized. The knowledge students learn should be a complete system, not fragmented and fragmented. Therefore, it is necessary to design a system based on the school's physical education goals and the "curriculum standards". Through the system design, the knowledge that students learn is not a fragmented piece of knowledge, but a knowledge system with a logical level. Students can grasp the internal connections between different knowledge points and grasp the context of the knowledge structure of sports disciplines. The result of the system design will appear in the form of a knowledge map. The knowledge map of the sports discipline is a combination of the discipline knowledge logic and the student development logic to connect the knowledge points and systemize it [3]. However, the current difficulty for the physical education discipline lies in the fact that there is no link between the various knowledge points of other disciplines, and no one can be missing, and no one can be reversed. The relationship between the physical, psychological, and cognitive development of students and physical education has not yet been clarified. In other words, designing a systematic physical knowledge map is the key and difficult point of micro-video production, and it is also one of the difficulties faced by the development of MOOCs in physical education.

2.2 Changes in the concept and quality of physical education teachers

In the implementation of MOOCs teaching, on the one hand, physical education teachers cannot think that students have already learned new knowledge of sports and health through the MOOCs platform, so we adopt sheep-herding teaching in the classroom and allow students to do activities at will; on the other hand, we should not ignore the accumulation of students' learning experience through the MOOCs platform, and still follow the traditional teaching model. For teaching, we should make full use of the students' existing knowledge and class time to promote students' learning. To this end, physical education teachers should first carry out a conceptual change, that is, the teacher-centered and knowledge-based teaching model should be transformed into a teaching model centered on student development and ability improvement as the core. Physical education teachers should establish that students are the main body of learning, fully believe in their abilities, let them explore and discover, and let students become the masters of learning. Secondly, there should be a role change, that is, from a teacher to a mentor. Students have already understood and mastered the knowledge points through micro-videos. There is a lot of time in the classroom for teachers and students to communicate and guide one-on-one. Physical education teachers are no longer the transmitters and professors between knowledge and students, but students' doubts mentor and helper of difficulties and problems. Third, the subject literacy should be improved. In traditional physical education, the subject literacy of physical education teachers focuses on mastering subject knowledge. Under the background of MOOCs, the subject literacy of physical education teachers is not only manifested in the mastery and teaching of sports and health knowledge, but more importantly, helping students use micro-video develops the ability and awareness of autonomous learning, helps students connect fragmented knowledge to form a complete system, and guides students to apply the knowledge points learned from micro-video to competitions, physical exercises and other activities. Finally, education quality should be improved. Under the background of MOOCs, teachers and students, students and students interact more frequently in physical education classrooms. Physical education teachers should always pay attention to the development of students' emotions, attitudes and values by grasping classroom events, so as to achieve equal emphasis on teaching and educating people. It can be said that the requirements of MOOCs for physical education teachers are much different from those of traditional physical education. Although its performance is not so prominent, its role is even more important. How to realize the transformation of the concept and role of physical education teachers, and improve the subject and education quality is the key and difficulty in the development of MOOCs in physical education teaching.

2.3 Rationally locate MOOCs in physical education teaching

The practical significance of MOOCs for physical education is self-evident, and difficulties will be solved with the advancement of scientific research and the improvement of teachers' abilities. So to what extent does physical education teaching implement MOOCs and how to position MOOCs in physical education teaching? Based on literature research and interviews with experts, frontline teachers, and students, it is believed that "physical education teaching should be supplemented by MOOCs learning traditional sports classrooms teaching-oriented". First, physical education should welcome the advent of the MOOCs era with an open mind. Modern information technology has a profound impact on the entire human society, and has injected new vitality and vitality into school

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education. MOOC is the embodiment of modern information technology in education. Tang M, counselor of the State Council, said: "MOOCs is a revolution that no one can afford to lose." In physical education, MOOCs play an important role in mastering sports skills for students, cultivating students' autonomous sports learning awareness and ability, and improving the efficiency and quality of physical education[4]. Therefore, physical education should follow the tide, welcome the advent of the MOOCs era with an active and open mind, make use of modern technology, give full play to the advantages of the MOOCs platform, and actively flip the classroom, otherwise it will lag behind the development of the times. Second, MOOCs has the deepest impact on education is the flipped classroom, and the essence of the flipped classroom is the educational concept. Under the influence of contemporary educational reform thoughts, even if MOOCs teaching is not implemented, the concept and role of physical education teachers should be changed to focus on student development, so that students can get the greatest development on the existing basis. In other words, it is not that MOOCs has changed physical education, but as modern information technology, the development of MOOCs caters to and conforms to the changing trend of educational concepts. Third, the characteristics of the physical education subject determine that "physical education should be supplemented by MOOCs learning and physical education classroom teaching should be the main." In other subjects, especially cultural courses, students can basically achieve the teaching goals of learning and using knowledge through carefully designed micro-videos, while physical exercises determine the realization of the teaching goals through micro-videos as the main means. This is because physical education requires students to master one or two life-long sports skills and improve their physical fitness. The acquisition of motor skills cannot be accomplished by memorizing the routes, links, and rhythms of technical movements through micro-videos. Forming a clear movement concept through micro-video is only the first step. On this basis, only after thousands of physical exercises can you master movement skills. The maintenance and improvement of students' physique is even more inseparable from "physical exercise". Without "physical", no matter how many physical exercise skills and methods a student masters, it is meaningless. More importantly, MOOCs can't realize the unique educating function of physical education. The routines of physical education classrooms are for the training of students' discipline, the competitive competitions in the physical education class are for the development of excellent quality of students, and the frequent interpersonal communication in physical education teaching affects students' emotions and attitudes. Neither the formation of values nor the formation of values can be achieved in front of a computer alone. As George Simmons said, don't try to let the MOOCs solve all problems[5]. With the rapid development of information technology today, physical education must actively use the advantages of MOOCs and occupy the commanding heights of education, otherwise it will lose development opportunities[6]. At the same time, recognize the characteristics of the physical education discipline, and can't blindly follow the trend, otherwise it will be enslaved by modern technology.

3. Exploring the path of building a MOOCs platform for physical education teaching in colleges and universities

3.1 The organic combination of MOOCs and traditional physical education

Physical education should welcome the advent of the MOOCs era with an open mind. Modern information technology has a profound impact on the entire human society and has injected new vitality and vitality into college physical education. The MOOC teaching is mainly about ten minutes of video, emphasizing student experience and interaction, while the physical education class is completed through scientific and reasonable physical education and physical exercises. Therefore, the basic steps of sports MOOCs video production: clarify the teaching goals and objects, select knowledge and skill points, analyze the knowledge and skill points to form a course demonstration script, find and process teaching materials, synthesize and test teaching videos, and make the videos meet the special requirements of physical education demand. On the basis of traditional physical education, the characteristics of open MOOCs and resource sharing are used to allow students to watch sports movements more intuitively. They can also share the quality courses of other schools. However, it is important not to rely too much on the form of MOOCs. It should focus on traditional physical education, supplemented by MOOCs, and integrate multiple information resources to jointly promote the reform of college physical education.

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3.2 Improve teachers' teaching ability

Physical education teachers are an important part of physical education, and their teaching ability determines the quality of teaching. Under the background of MOOCs, physical education teachers' academic literacy is not only manifested in the mastery and teaching of sports and health knowledge, but more importantly, it helps students develop autonomous learning ability and awareness through the use of micro-videos, and helps students connect fragmented knowledge to form a complete the system guides students to apply the knowledge points learned from micro-videos to competitions, physical exercises and other activities. Therefore, in the recruitment of physical education teachers, schools should pay more attention to the theoretical knowledge and teaching ability of teachers, rather than the level of sports skills. In physical education teaching MOOCs classrooms, the exchanges between teachers and students, students and students are more frequent. Physical education teachers should always seize the classroom events and pay attention to the cultivation of students' emotions, attitudes and values, so as to achieve equal emphasis on teaching and educating people. Schools should conduct regular training for physical education teachers to increase the study of theoretical knowledge. At the same time, they should also conduct regular assessments of teachers. In addition to self-evaluation after the end of the course, the evaluation of normal courses should also be added to avoid bias all strive to establish a team of college physical education teachers with parallel theory and skills.

3.3 Strengthen the supervision and assessment system of students

Although the reform of physical education is increasingly focusing on humanization and emphasizing student-oriented, the goal of increasing students' physical health and cultivating moral quality has not changed. To achieve this goal, the joint efforts of teachers and students are needed. Although MOOCs can mobilize the enthusiasm of students, it lacks necessary supervision for students. A study group team can be formed, with 4-6 people as a group, and each group elects a group leader. The group leader is responsible for task assignment, knowledge tracking and quality monitoring, and teachers randomly check the knowledge of each group. In the process of physical education, students experience, feel and comprehend knowledge. When they encounter problems, they can learn from each other and discuss together, and they can also communicate with teachers one-on-one or one-to-many. For students' common problems, teachers can demonstrate in a unified way and solve them collectively. At the same time, students are constantly guided to think about deep-seated problems. Conduct regular assessments of students' learning progress, supervise students to learn and exercise, develop a good habit of lifelong sports, and have a healthy physique.

4. Conclusion

The advancement of science and technology has promoted the rapid development of education informatization. The combination of MOOCs and physical education under the new situation will become an inevitable trend in the development of physical education in colleges and universities in the future. It is the original aspiration and mission of higher education to make the Internet better for the country and the people, and better use of Internet technology to improve the level of physical education to meet the growing learning desires of all students. Colleges and universities must face the current era of high-speed information reform, take advantage of the situation, seize the opportunity of Internet education, and achieve sustainable development. Accelerate the construction of MOOCs courses, enrich the scientificity and practicability of the theory, and conduct rich research on MOOCs from multiple aspects, make MOOCs be implemented in physical education, and promote the informatization, scientific and modern reform of physical education, so as to promote the reform and development of physical education.

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