

Research on the Teaching Informatization Model of Physical Education Courses in Vocational Colleges in The Post-epidemic Era

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Abstract

During the new crown period, physical education courses in Vocational Colleges adopted the online modern information-based teaching mode, using various forms of online guidance to effectively ensure the teaching progress; In the post epidemic era, aiming at the problems of single PE teaching informatization mode, low teaching effect and teaching quality in vocational colleges, we should build a multi informatization teaching mode resource platform, reconstruct its teaching process, expand multi-channel teaching resources, guide students to innovate independently, learn lessons from online teaching mode, improve its teaching informatization teaching level and improve the informatization construction mode.

Keywords

Post epidemic era, Higher vocational colleges, Physical education courses, Teaching informatization.

1. Introduction

The COVID-19 has brought about unprecedented changes to the physical education teaching in vocational colleges. Although the modern information technology teaching is integrated with the offline course teaching, the teaching effect and quality need to be improved. The informatization construction of physical education courses in vocational colleges has made some progress, but there are many problems emerging, such as less integrated informatization teaching in the classroom, no improvement in the overall classroom reconstruction of physical education, no construction of diversified informatization education technology and resource platform, teachers' informatization technology literacy to be improved, and generally weak information processing ability. The development of online learning resources, innovative teaching methods, the school puts forward reasonable suggestions for the construction of sports infrastructure, promoting the construction and integration of vocational education informatization, and further improving the teaching informatization mode of Vocational Colleges' sports courses, so as to better promote the educational informatization development of Vocational Colleges' sports courses in the post epidemic era.

2. The Demand of Physical Education Teachers' Ability Improvement in The Post Epidemic Era

2.1. The physical education classroom model has changed, which requires the improvement of the ability to master information-based teaching

The post epidemic era has made great changes in the teaching mode of higher vocational physical education, and put forward high-level requirements for the informatization teaching ability of physical education teachers. At present, the epidemic situation at home and abroad is

in a long-term fluctuation and local prevention and control stage. The dual line hybrid physical education teaching mode has become the mainstream of physical education teaching mode. With the emergence and gradual application of University MOOC, flipped classroom, SPOC, keep, school online and other software and official account, the dual line hybrid physical education teaching should adapt to the trend of information-based teaching. At the school management level, we should vigorously promote higher vocational colleges and cross regional network research, and actively promote the popularization and application of online and offline hybrid teaching mode. Teachers are the key to the use of information-based teaching, which is to guide and promote the use of information technology by PE teachers in vocational colleges. It is of great value to guide their information-based teaching and training, and is conducive to promoting the information construction of vocational colleges to "information 2.0 stage".

2.2. Changes in theoretical teaching contents, focusing on strengthening life and health education

The theoretical teaching of physical education in higher vocational colleges not only covers the theoretical knowledge of skills and special theoretical knowledge, but also includes the knowledge system of life and health education. Natural disasters, public health emergencies, social and national security problems have always existed, which have a specific crisis state for human survival. Therefore, higher vocational physical education teaching should take the initiative to undertake life education and health education, establish the teaching concept of attaching importance to and reverence for survival ability, integrate life and health education into daily physical education theory teaching, strengthen the cultivation of students' health knowledge and survival awareness, improve their ability to deal with emergencies, and cultivate their ability to quickly and safely deal with public health events and accidents is one of the contents of sports information teaching.

2.3. Changes in the teaching contents of skill courses put forward higher requirements for the creation and compilation of basic movements of Physical Education Teachers

Due to the change of teaching environment, the teaching skills of physical education teachers in higher vocational colleges are limited to a certain extent, and some teaching contents such as environment and venue cannot be carried out. In the post epidemic era, the physical education teaching in the semester was conducted by combining online teaching and offline teaching. In the early stage, the online teaching content was replaced by simplified aerobics, basic physical fitness exercise (including exercise time, exercise volume, exercise intensity, exercise methods, with the help of simple sports equipment, post exercise relaxation exercise), martial arts, physical fitness exercise, etc, The sports that physical education teachers are good at cannot be displayed. Therefore, further requirements are put forward for the creation ability of physical education teachers' basic physical fitness movements; In the later stage of offline teaching, physical education teachers should first fully understand the basic knowledge and physical quality of students through online physical education teaching, and then use the modern information-based teaching mode for teaching.

2.4. Strengthen the information-based teaching mode of physical education and carry out the organic integration of Two-line Hybrid under the support of digital technology

It is a new test for PE teachers in Vocational Colleges for their digital literacy during the epidemic. PE teachers should accurately identify the teaching contents that are suitable for students in vocational colleges to accept and master, and carry out double line hybrid teaching. The action plan for improving the digital literacy and skills of the whole people points out that it is necessary to improve the digital skills vocational education, promote professional

upgrading and digital transformation, optimize and improve the curriculum, and build a high-level digital skills vocational education, At present, the digital literacy of some PE teachers in vocational colleges is at a low level as a whole. Therefore, PE teachers should actively carry out new forms of mixed learning, cooperative exploration and other learning methods by using digital information technology, and blend the real world, the digital world and the virtual world to form a normal state of physical education teaching, Apply information technology throughout the whole physical education classroom (pre Class Autonomous Learning and preview, teaching methods, in class learning, understanding and mastering, assessment, recognition of learning results, evaluation of diversified double line mixed mode, etc.), promote the digital information mode of physical education teaching in Vocational Colleges and form a teaching system to reconstruct the structure of physical education teaching.

3. Problems in the Informatization Model of Physical Education Teaching in The Post Epidemic Era

3.1. Multiple difficulties encountered in the mixed teaching mode of double line and mutual transformation

Traditional teaching in higher vocational colleges can ensure the students' exercise volume and intensity, but the teaching methods and means are relatively simple, and the students' physical fitness levels are different. Physical education teachers use the barrel theory to meet the students' general physical fitness as the standard for safe teaching. Differentiated teaching and hierarchical teaching are rarely used in Vocational Colleges' physical education informatization teaching; Secondly, sports information teaching has been used to some extent, but most of them can't really play a good teaching effect. The implementation of sports online courses in the post epidemic era has not been smooth sailing. Under the information-based teaching mode, teachers can't fully grasp the actual learning effect of students. As a result, students become spectators of sports classes, while teachers return to the complete ruler of traditional teaching classes. The effect is not ideal. At present, there are still many problems between physical education teaching in the "Internet + information age" and offline teaching after students' return to campus, such as insufficient connection of teaching content, unsatisfactory learning effect of students, low utilization rate of teachers for information-based teaching, no connection between online teaching data and offline teaching, and no update of evaluation mode, Some of the physical education teachers voluntarily accept the current information-based teaching and the use of many teaching software. The above will lead to the formation and development of the sports information-based teaching mode.

3.2. On the teaching organization of double line integration

In the post epidemic era, vocational colleges' physical education teaching adopts the online and offline dual teaching mode, and its dual line integrated teaching has become an inevitable trend for most vocational colleges. However, in the actual operation stage, some colleges have failed to unify the physical education information-based teaching mode, reasonably arrange the physical education school-based curriculum construction and select high-quality teaching resources suitable for their own physical education curriculum, Some professional physical education teachers in higher vocational colleges directly choose online physical education courses (micro courses and curtain courses) in combination with offline physical education teaching in undergraduate colleges. This teaching mode achieves general teaching effect and can't complete teaching tasks with high quality. For the first time, most of higher vocational physical education has adopted the "double line integration" mode for sports information teaching, and students' acceptance, participation and teaching effect have not yet achieved good results. In addition, different online teaching platforms and single offline teaching materials and

information-based teaching means among higher vocational colleges have led to no innovation in teaching content, concise assignment, non standardization of students' online data management, and the effective completion of students' exercises.

3.3. UTAUT model and influencing factors of PE Teachers' psychological acceptance of information teaching technology in Higher Vocational Colleges

The key point for the stable development of the information-based teaching mode of physical education teachers in vocational colleges is that the full-time physical education teachers' psychological acceptance and information-based teaching behavior are generated. The use of the integrated technology acceptance model (hereinafter referred to as "UTAUT model") can predict the information-based teaching behavior of Physical Education Teachers, and then affect the teaching effect of the overall information-based teaching mode of physical education in schools and the periodicity of information-based teaching of physical education, It has certain reference value for putting forward corresponding strategies. The UTAUT model integrates the change process of tam-tam3. Its main application fields are education status investigation and local modeling. In the future, the research direction will focus on the application efficiency of digital information technology and the research and application of intervention measures. The UTAUT model can optimize a variety of theories to predict individuals' adoption and Application of new technologies. In combination with the physical education teachers in higher vocational colleges, their efforts expectations, performance expectations the promotion condition and social influence constitute the influencing factors of PE Teachers' psychological acceptance at the end of information-based teaching. The willingness of PE teachers in vocational colleges to use information technology in PE classroom is an important component of teachers' digital information technology literacy. Its restrictive factors are mainly information technology ability and attitude. The reform and innovation of digital information teaching are largely influenced by PE Teachers' willingness to use information technology.

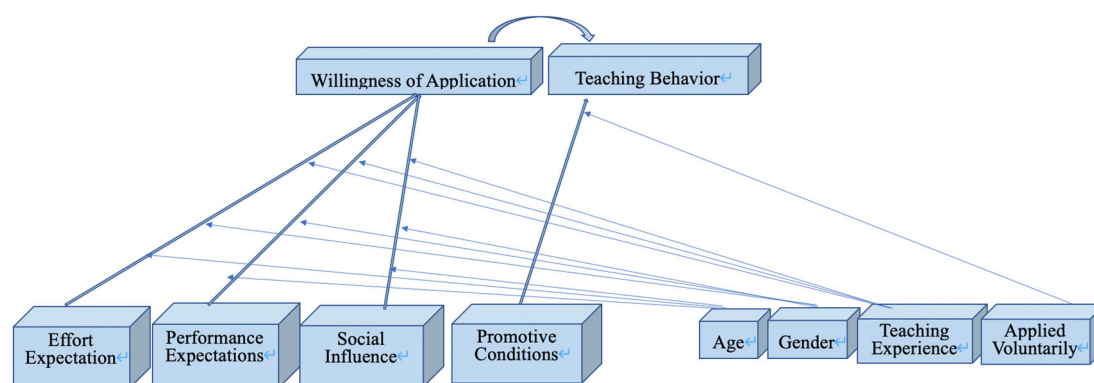


Figure 1. UTAUT Model Framework

4. Strategies for Promoting The Level of Informatization Model of Physical Education Teaching in Vocational Colleges

4.1. Accelerating the implementation of information management system and system in Vocational Colleges

At present, the rapid development of information technology in vocational colleges has become a trend, and the rapid promotion and impact of information technology on vocational colleges are more obvious. At this time, the senior leaders of the school should strengthen the overall

situation, improve and optimize the top-level building design of teaching information management services, integrate cutting-edge technologies such as big data and artificial intelligence, integrate physical education teaching, scientific management and implement system construction, One of the more important links is to implement the relevant systems of the CIO as soon as possible. The CIO is mainly responsible for the key trend development of the informatization construction of vocational colleges. For its overall informatization development strategy, planning the digital campus plan and adopted standards, promoting and implementing the organizational reform of the informatization school leadership system, and constantly strengthening the strategic orientation and consensus of the overall informatization core competitiveness of vocational colleges, The informatization leadership of its Information Supervisor plays an important and irreplaceable role in the informatization development of vocational colleges.

4.2. Constructing the resource platform of multi information teaching mode

In the process of realizing the development of modern informatization, higher vocational colleges should focus on promoting the innovation of teaching mode, based on the actual development of school sports, pay attention to the improvement and application of theoretical knowledge, re integrate sports informatization teaching resources, make full use of online network resources, promote the effective integration and utilization of sports informatization teaching resources, and create a multi-directional and all-round teaching resource gathering area, Truly realize that one platform can meet the teaching resources, teaching means and methods used in physical education teaching, cloud education platform app, various online operation official account, etc., and realize a diversified education resource system.

4.3. Reconstructing the teaching process of Physical Education

At the present stage, higher vocational colleges' Sports information-based teaching, based on the actual situation of vocational colleges, expand the teaching system, carry out discussion and analysis, classified collection, summary and induction in stages, so as to achieve the comprehensive improvement of sports classroom teaching level. At present, physical education teaching relies on a number of information-based teaching technologies. Therefore, the two-line mixed organization teaching mode of physical education information is the focus of teaching and needs to be implemented in stages:

1. Students' independent exploration of progressiveness virtual classroom. Teachers release classroom guidance tasks, upload teaching resources, group discussion, Q & a discussion, and regulate the process through the multi information teaching model resource platform. Students conduct independent exploration, raise questions, and online discussion;
2. Offline class, research and discussion. The teaching organizes summary and feedback for students in the independent exploration stage first, and then explains their key and difficult points and fallible points. Teachers and students work together to solve difficult problems and explore problems, and conduct action demonstration, arrange exercise mode and exercise intensity, exercise volume, hierarchical and phased exercise time, summarize the class, and assign homework;
3. The online classroom is used to expand and consolidate. Teachers release digital tasks and assignments online, review assignments, organize discussions, answer questions and solve puzzles, and provide digital feedback. Students carry out expanding and innovative online learning, online discussion, and timely adjust learning plans.

4.4. Strengthen physical education teachers' ability to skillfully use information technology

In the post epidemic era, sports informatization teaching puts forward certain requirements for the informatization ability of full-time physical education teachers. In addition, to build an

informatization system teaching system in higher vocational colleges, it is necessary to enhance the comprehensive quality of teachers, strengthen the construction of physical education teachers, improve the comprehensive quality of teachers, and promote full-time physical education teachers to skillfully use the double line integration teaching mode. When applied to the actual teaching process, physical education teachers need to clearly understand the actual impact value of the online teaching mode, reasonably integrate the beneficial teaching resources actually needed for teaching, actively use the modern online teaching software, reconstruct the classroom in combination with offline physical education, be familiar with the teaching process, and promote students' diversified learning of sports basic theoretical knowledge, life and health knowledge and sports special skills.

5. Summary

In the process of the development and research of sports information-based teaching mode in vocational colleges, it is necessary to take the multi information-based teaching mode resource platform as the main starting point, through the online network platform, teachers and students carry out exploration and cooperative learning of sports theoretical knowledge and technical skills, and comprehensively control the sports information-based teaching process, learning methods and online teaching process by combining online and offline multi-element comprehensive evaluation with students' evaluation results, Cultivate students' good study habits, broaden students' access to sports knowledge, further strengthen students' knowledge construction ability, and realize the further improvement and development of sports information technology teaching mode in vocational colleges.

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