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Study on Integration of Physical Education and Informational Education

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Abstract: The physical education as an integral part of the school education in this stage, not only has a very important role in improving the ability of the student movement, but also an important means to develop quality education. With the information technology development and mature, greatly promoted the development of sports teaching, it is not only from the teaching mode realize reform and innovation, but also enhance the students' own sports literacy and health awareness at the time to improve sports teaching efficiency. It should be said, the reasonable application of the current state-of-the-art information technology to sports teaching can deepen the students real understanding of the school physical education and sports from a certain extent, but also can change the traditional way of teaching, from the previous unilateral teaching to bilateral teaching, in addition, enhance the quality of teaching at the same time better enrich teaching content. In this study, based on the actual status of college physical education facing the teaching environment and information environment construction, research and analysis sports information teaching to provide a favorable reference for promote college physical education as well as the reform of the teaching of information technology.

Key words: Physical education, informational education, sports literacy

INTRODUCTION

In recent years, with the rapid development of information technology and mature, it is more and more applied to the College Physical Education. It should be said, it is not only able to create a suitable teaching situation for sports teaching at this stage, but also effectively stimulate and arouse students' study interest; addition, by the use of information technology openness and interaction as well as intelligent advantages, makes it easier for students taking independent search and retrieval and analysis on its own, thus cultivating and training students the ability to obtain relevant information. In this study, combined with the current problems and the status quo of the sports teaching, detailed explore and discuss the relationship between sports teaching and information technology teaching under the premise of information technology (Lemos *et al.*, 2012).

Information technology is an integrated technology that the current computer as the core, education technology as the foundation, by the integration of the spread of technology and communication technology to achieve the integration of multimedia information corresponding storage and edit operation. Its internal information generally includes graphics, images, video and animation, as well as sound. Through the information technology can realize the related multimedia information to the professional digital processing, thereby enabling

the corresponding multimedia information showing the diversity and integration and many interactive features from its essence. In school teaching, the application of information technology can further open up the students horizons, effectively lead and inspire students' thinking, enhance the student's own ability to understand and memory capacity, at the same time, stimulate the enthusiasm of the students, so as to achieve efficiency of teaching and student self-enhance seriously ability.

ACTUAL STATUS OF THE INFORMATIONAL SPORTS TECHING

In order to be able to better and more concrete understanding and mastering the actual development status of the current university informational sports teaching, we extract some schools from many universities to survey analysis and the results are as follows:

Sports teachers' professional title structure: In the survey results, we can easily find that Professor title in all physical education teachers have only about 4%, associate professor accounted for about 12%, lecturer accounted for around 38%, while the assistant accounted for about 45%. We can reach the conclusion that in the current sports teaching, have high professional titles of physical education teachers of the actual ratio is not much, a large part is the primary teacher or secondary teachers.

Teaching resources: In the survey, we found that only 9.5% of the teachers occasionally making courseware in the classroom teaching, about 54.5% of the teachers do not use the courseware. For the current LAN as well as Internet teaching resources, physical education teachers often prefer to use teaching resources in the Internet. This is mainly because some resources in this stage LAN relatively single, scarcity, cannot effectively meet the teaching needs of the current teachers. The Internet, E-mail and BBS are the current teacher centralized network tools. In the investigation process, more than 72% of the teachers have been used or started to use the Internet tools. In the "organizes the student to carry on the corresponding network study" and "the use of the Internet to achieve self-learning and participate in appropriate training", 59.9% of the teachers is not used in the true sense. From these two aspects can be known that college teachers lack of understanding the information technology in the teaching process. And for understand of the informational physical education teaching methods, as shown in Fig. 1.

Information technology equipment in the practical application of current college teaching: Through this investigation, about 95% of colleges and universities have established a dedicated multimedia classroom and more than 86% of the colleges and universities are already connected to the campus network in China. But at the same time, in the Physical Education can only use DVD and other traditional equipment, little use computers and multimedia equipment.

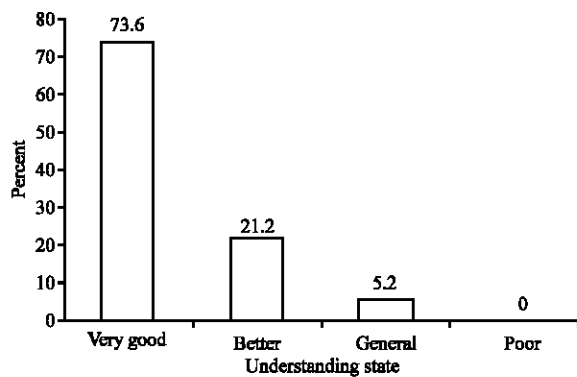


Fig. 1: Understanding of the informational physical education teaching methods

Facing difficulties in the development of sports teaching: Through this survey data show that in the universities sports teaching process, if physical education teachers really want to apply information technology and the corresponding technical equipment to assist teaching, certainly will encounter difficult problems more than any other subject. This is from a certain extent greatly dampened the enthusiasm of physical education teachers. As shown in Table 1 (Ramatlala and Nenty, 2012).

Actual investigation and analysis for relevant information technology projects: In the investigation of some information technology project found that many college physical education teachers can well apply current information technology to the current stage of the sports teaching in the development of physical education teaching. According to these data shows, more than 48.9% of teachers think should reform and innovate current instructional design method, while about 35.2% think that it is necessary to train for using and making multimedia courseware, moreover, 12.3% of the teachers believe that professional training needs to be conducted on the basis of use of the computer network and the operation and use of relevant software. It is somewhat rusty through the use of some professional information technology to carry out scientific, reasonable teaching design and making multimedia courseware. But it can see that the teacher is willing to carry out this training and learning.

Information technology actual application situation in current sports teaching and management: The practical application process of the current office management system. These management systems generally include the current common some office documents and regulations system and teaching plan and teaching program and student material and so on. It should be said that through the use of professional information technology software can realize harmonious management system for special summary and induction. a special review and summarize the harmonious management system through the use of IT software professional. So, we can use it at anytime, anywhere in the using process.

The choreography application in learning internal competition system This stage the school in various sports competitions, by the use of professional

Table 1: Reason that part colleges have not set up soft volleyball class in china

Category	School leaders do not pay enough attention	Propaganda is not enough	Don't think necessary to open alone	Limited by place	Limited by teachers
No. of schools	2.00	4.00	29.00	21.00	1.00
Percentage (%)	3.51	7.02	50.88	36.84	1.75

information technology to the athletes according to a certain standard corresponding classification and storage for the future to find (Gouthon *et al.*, 2012). The practical application in current teaching system. By using the special information technology software enter some theoretical questions into the database to make professional database system. This can not only convenient to direct call the test, but also can automatic scoring (Da Silva Filho *et al.*, 2012).

The practical application in current teaching evaluation system. Use professional information technology to effective evaluate the PE teachers in sports classroom teaching, the teacher after school will be able to get feedback, so that teachers timely correct their own inadequacies and effectively enhance the efficiency of classroom teaching.

ROLE OF INFORMATIONAL PHYSICAL EDUCATION TEACHING

Form the correct visual imagery, which can effectively improve the students' movement skills: Through using some of the current education technology, to establish an accurate, clear visual imagery, can effectively improve the students' movement skills. It should be said, observation ability is the basic skills students need to master in the sports learning and through the use of professional information technology has a very significant effect on training and tempering students in their own observation ability. In the process of sports teaching, if students want to accurate finish, they should be familiar with these technical movements. Many sports action not only have complex structure, but also involves a lot of movement skills, the most important is they need to be completed in an instant. For example, when carrying out the throwing events activities, the order of the power in javelin throwing; jump activities, exhibition body action back style in high jump process and turn the wrist in straddle jump process, these are never really used motor skills in the daily lives, this to some extent has increased the difficulty of Physical Education Teaching. Although in actual the sports teaching process, teachers have repeatedly explain several demonstration, but still have a lot of students are not in place the best time to grasp the subtle changes in these actions. And by using this specialized information technology to make multimedia courseware, students can observe and study technical details which need to pay attention in each action more effectively and then it can better and faster to establish the image of the specific action appearance, to help students master and familiar with the points and difficulties of the technology, while it can effectively to

enhance teaching effectiveness and efficiency of teaching (Papaioannou *et al.*, 2012).

To further improve and perfect the deficiencies in the current sports classroom teaching: At the present stage, in part of the colleges the sports classroom teaching due to the limitations of their own teaching conditions and teaching environment, some action cannot be completed and demonstrated through teachers' ability in the classroom teaching, under such circumstances, students cannot in the true sense to observe one of the action from a comprehensive, three-dimensional perspective. In addition, when teachers rational and efficient decompose some sports, even if accurate, complete demonstrate these actions, but as the shorter cycle time of the action, students can hardly read and understand the essentials and skills of the action. For example, during the Hurdles Teaching, teachers can not in the form of a " frame by frame" corresponding to the operation of exemplary. But through the use of professional information technology not only allows students to clearly see the decomposition of each frame-by-frame demonstration and also be able to see some different angles of the action demonstration. Otherwise, in actual classroom teaching process, with the increasing age of the PE teacher, some difficult action is difficult to accurately set an example, but through the production of multimedia courseware to support classroom teaching can better remedy these deficiencies, taking Schematic diagram of Hurdle Teaching shown as Fig. 2 for example.

To some Extent, Achieve the Effective Improvement of Students' Autonomous Learning Ability: At present, interaction is an important feature of current information technology teaching. By comparison, physical education time in a small proportion of school teaching, so the time which students exchange and communicate with teacher is relatively short. Using the advantage of interaction, all kinds of information can be timely feedback and presented and then realize the two-way communication between students and teachers. It makes student's individual guidance into reality; this also can reflect the true meaning of "teach students in accordance of their aptitude". It should be mentioned that making and using multimedia courseware can help students better to grasp

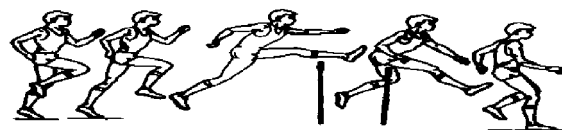


Fig. 2: Schematic diagram of hurdle teaching

Table 2: List of the motions and purposes of students to have PE class

Motions and purposes	No.	Percentage (%)
Harden the body and improve health	367	41.9
Learn a expertise and lifelong fitness	196	22.4
Follow the crowd and have fun in class	126	14.4
Need of graduation and not much interest	97	11.1
To pass examinations	69	7.9
Unclear	20	2.3

and be familiar with some of the sports knowledge and skills in a certain extent, through using electronic teaching materials or using the Internet to retrieve sports knowledge, through the method of computer interaction to achieve the purpose of improving the students' self-learning ability. Generally speaking, vivid and rich appeal of teaching behavior and teaching information can stimulate students' senses, to obtain and maintain appropriate sports knowledge; in keeping with the habit of thinking of the current human, it can help the students to discover and explore knowledge initiatives, it's also helpful for students to use their associative thinking to better establish the effective link between new knowledge to old knowledge. As a result, using information technology to sports teaching can help students form a reasonable and effective structure of understanding. As the following Table 2 (Lauritsalo *et al.*, 2012).

SEVERAL WAYS OF INFORMATION IN SPORTS TEACHING AT THIS STAGE

Electronic lesson plans: It should say that the multimedia teaching generally has the advantage of comprehensive application and the three-dimensional performance of map, sound, image, word, so the teacher can teaching blackboard writing and what we need in some multimedia data and programs are stored in the corresponding fixed computer, it forms the electronic lesson plans, then through the use of network equipment and professional projection equipment to show the electronic lesson plans. Electronic lesson plans from a certain extent, increase the amount of information of the sports top in class. In the Information-explosion Era, using this way enables timely update the textbooks, moreover, the electronic plans tend to have several advantages such as direct viewing, beauty and novel image, to some extent it is more in line with some habit of students. For example, when explaining some rules of the aerobics, they can let students to understand and be familiar with the current world aerobics level in advance, they can also allow students to watch the video of some of Aerobics Competition and combine with the video game to explain aerobics competition rules, appreciate and analyze a number of performances of high-level athletes at the same time, thus be able to further deepen and consolidate the students' own memory effect.

Table 3: Degree for the favor of aerobics

Degree	No. of students tested	Percentage (%)	No. of teachers	Percentage (%)
Very like	88	55.00	42	52
Like	58	36.25	34	42
General	14	8.75	5	6

Table 4: Significance of the aerobics class in colleges and universities

Level of awareness	No. of students tested	Percentage (%)	No. of teachers	Percentage (%)
Very meaningful	89	55.63	45	55.56
General	57	36.63	32	39.50
Less significant	14	8.75	4	4.94

Table 5: Aerobics on the necessity of mastering a lifelong fitness method

Level of awareness	No. of students tested	Percentage (%)	No. of teachers	Percentage (%)
Very meaningful	120	75.0	50	61.7
General	32	22.5	30	37.0
Less significant	8	5.00	1	1.3

Furthermore, in the current technology in the teaching process, when teachers explain and analyze technical movements, they can choose to use a laptop, digital camera, mobile projection screens or other equipment to constitute a state-of-the-art and efficient multimedia teachers, in accordance with the actual needs to explain the technical specifications, of course, teachers in the teaching process can also record the error actions of the students in the process of learning to facilitate future improvements and corrections. As the following Table 3-5.

Development and uses of CAI courseware: It should be mentioned that during the sports teaching process with the information technology, CAI is an important means and effective measure to achieve the goal of 'teach students in accordance of their aptitude'. Based on the actual characteristics of sports teaching in this stage, when carrying out theoretical classroom teaching, they can choose to use online or courseware teaching. Actually refers to the so-called courseware way is through the use of the campus network or some server in the LAN to store some professional CAI Courseware, teachers according to the current teaching situation to choose some appropriate courseware to carry out the teaching activities. Online teaching is mainly through connecting some computers on the campus network or LAN with the Internet, students in the teaching process are free to choose the time of education. Finally, teachers carry out the classroom teaching according to the actual situation of the students and the corresponding feedback. In this session, teachers can also store the courseware which is used in the classroom teaching process in a specific server, it can contribute to independent learning of the students, of course, they can also regard the

courseware as a template and combine with some of the latest information and data on the Internet to make the network courseware which is needed in future classroom teaching. For the details in courseware, teachers can break up into text format or other forms of documents according to certain standards and rules. Of course, it can also be made into the form of dynamic or web page published on the Internet, it can facilitate the independent browsing of students in the future. In addition teachers can take advantage of some advantages of the current network search and download some related to or associated with the teaching content. And students can also independent and initiative to browse it after class or in accordance with the teachers in the classroom over guidance to find relevant courseware for autonomous learning. In this way, allow students based on their ability and the real needs of themselves to independently choose some teaching content to learn, during the individualized teaching, it can also mobilize the enthusiasm and initiative of the students, then it realize effectively improve the efficiency of classroom teaching and teaching effectiveness (Sebire *et al.*, 2013).

Building sports teaching website, put distance education and online teaching into practice: It should be mentioned that online teaching and distance learning has become the two main forms of current education. According to the current teaching situation and environment, to build the sports teaching website to realize distance education and network teaching has become an important task to promote information technology education. In the current stage of the sports classroom teaching process, establish corresponding network classroom and self-study classroom or practice question bank can allow students to freely initiative learn on the Internet and with effective communication and discussion between teachers or students to ensure stability carried out of the classroom teaching and open up the horizons of the students; while on the other hand, students can also upload assignments or activities in real-time to the web and sometimes only need to complete assignments to teachers online. In mobilizing students own enthusiasm, at the same time effectively improve the efficiency of classroom teaching as well as the quality of teaching (Fu, 2012).

MAIN METHOD AND EFFECTIVE WAY TO OPTIMIZE AND IMPROVE SPORTS TEACHING INFORMATION

Based on current sports teaching characteristics, to further strengthen and consolidate the information construction of teaching place: In some current sports

practice classes, generally poor venue environment and lack of professional information technology equipment, then need to reach specialized multimedia classroom to watch some multimedia courseware, in actual practice, they need to go to a special playground, which to some extent increase the difficulty of their organization. And by previous research found that most of our universities in the construction of sports venues did not take into account the future information technology equipment, so in such circumstances, strengthen and update sports classroom teaching sites information technology hardware has become an important measure to promote the physical education teaching. At present, construct some modern professional teaching facilities in some conditional gym, indoor run gallery and stadium to realize the student exercise, at the same time carry out classroom teaching using the application of specialized information technology. It should be said that the concept of "mobile multimedia classrooms" has gradually entered people's vision, this "classroom" actually means through the use of laptops and digital projectors as well as digital video cameras and other equipment to form an image, specific teaching spaces. Because the teaching equipment has smaller volume, lighter weight and easy to carry, more flexible operations, so can effectively solve real-time teaching needs in the actual process (Casimir, 2013).

To further strengthen the research of practice class information: In the current sports teaching process, due to the impact of hardware facilities and teaching environment, bring great distress to current practice teaching and become a bottleneck to impede the further development of the sports information teaching. But the good news is that a part of the school began to try to use modern information technology to carry out the corresponding practice teaching. Such as the Environmental Management College of China in physical education teaching, the first to let the students seriously watch the video technology needed to learn, then on the basis of each decomposition and repeated observation, then to the corresponding practice teaching, which lay a solid foundation for sports teaching reform within the next period of time in our country. However, on the whole, we should also see that only a few schools using information technology to carry out sports teaching in China, most schools still use traditional teaching methods and teaching ways to carry out sports teaching, what we often said, teachers do explanation and demonstration in teaching. This teaching method is not only unfavorable to students to better understand and grasp some technical movement, but also will influence and weaken the students' learning enthusiasm. Therefore, at this stage of

the sports teaching process, by making full use of the campus network and the Internet, under the premise in accordance with the syllabus and teaching content, make the knowledge into specialized courseware and placed in a special server, to facilitate students at any time to watch and learn in their spare time from the campus network. This can not only realize the teaching effect and effectively improve teaching efficiency, but also can mobilize the enthusiasm and initiative of the students themselves and expand the horizons of the students (Tsangaridou and Lefteratos, 2013).

CONCLUSION

The sports teaching as an integral part of the school education at this stage, not only has a very important role in improving the movement ability of the student, but also an important means to carry out quality education. With the information technology development and mature, greatly promoted the development of sports teaching, it is not only from the teaching mode realize reform and innovation, but also enhance the students' own sports literacy and health awareness at the time to improve sports teaching efficiency. It should be said, the reasonable application of the current state-of-the-art information technology to sports teaching can deepen the students real understanding of the school physical education and sports from a certain extent, but also can change the traditional way of teaching, from the previous unilateral teaching to bilateral teaching, in addition, enhance the quality of teaching at the same time better enrich teaching content. In this study, based on the actual status of college physical education facing the teaching environment and information environment construction, research and analysis sports information teaching to provide a favorable reference for promote college physical education as well as the reform of the teaching of information technology.

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