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TEACHING EXPLORATION ON INTERNET TEACHING OF PHYSICAL EDUCATION BASED ON BLACKBOARD ACADEMI SUIT

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ABSTRACT

Taking the track and field teaching as a case, the author carried out an applicative exploration on network teaching by using methods of experiment, questionnaire and documentation. The results show that the technical evaluation and technical standards of both group were better than before, in technical evaluation, the experimental group are superior to the control group, the boys have significant difference, the girls were very significant; in technical standards, the experimental group was lower than the control group, no significant difference; the theoretical examination results of experimental class was significantly better than the control class, the difference was very significant; the students' attitude of the implementation of track and field network teaching mode is approval. The track and field course network teaching must follow the principles of" complement each other, complementary advantages"," enhancing effect, increasing quality and promoting development" to promote the reform of teaching mode and improve teaching quality.

Keywords: *Blackboard Academic Suit(BAS); Internet Teaching（IT）; Physical Education（PE）; Experimental Exploration（EE）*

1. INTRODUCTION

Blackboard is a digital teaching platform, developed by the Blackboard company of United States, teachers and students can study and communicate in any course. The platform can achieve the multifunctional teaching support of task, testing, evaluation and other teaching links, and is the most important application system supporting internet teaching, and provide a strong teaching and learning online virtual environment for teachers, students. Take track and field course as an example to carry out the research of network teaching mode in college physical education, exploration advantages and disadvantages of using the network platform for sports teaching compared with traditional teaching methods, laying theoretical basis for the sports course construction and promoting the reform of physical education, and improve the physical education teaching level, quality and efficiency, and cultivate the students' innovation spirit and practice ability.

2. RESEARCH OBJECT AND METHODS

2.1 The Research Object

Take four natural class of Grade 1 in sports science institute of Qinzhou university which summed to132 students as the experimental object,

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determined 1, 2 class for the experimental group, 3, 4 class as control group through the method of draw. The experimental group included 65 people(boys 41and girls24); The comparison group included 67 people (boys 40and girls 27).

2.2 Research Methods

2.2.1 Literature material law

Retrieved 49 relevant authority researches related track and field theory and network teaching systematically, collected a large number of relevant information and data.

2.2.2 Experimental approach

Experiment Length and Time allocation: The experiment lasted a term from February 2010 to June 2010, a total of 18 weeks. Scheduling for: special theory and related technical principle 12 period, technology teaching 52 period, assessment 8 period.

Experimental variable control: In the teaching test, the dependent variable is the study results, the independent variable is teaching mode. Control group adopted traditional mode of teaching according to the teaching program, the experimental group adopted the network teaching mode. The teaching process was held by me, two groups were consistent in the teaching contents, teaching hours, the study progress and ground equipment. In order to ensure the veracity and reliability of the experiment, the experiment adopted single blind experiment, in order to avoid the abnormal mentality and influence the experimental results. Technical evaluation and theories test were based on collective manner, the assessment content and standard was consistent [5]. To avoid the results' deviation caused by the difference of students' master degree, this experiment chose hurdles, javelin and flop as teaching content. The author carried out measurements before and after the experiment, and the students didn't understand the test items and contents, Test content were: basic theoretical knowledge, technology assessment, technology assessment and the body shape and quality (height, weight, 100m, the men's 1500m, women's 800m, man's 5kg and women's 4kg shot put, in situ longitudinal jump and devices flexion). All the test and assessment were held by four teachers who hadn't participated in the experiment, and graded with the unified standard, and the average of the four examiner teachers' assessment was the final results.

The experiment process:

The experiment results reflected in students' understanding of learning process and ability improvement, etc. the author took in-depth analysis and research on teaching plan, teaching syllabus and teaching schedule before the experiment. Combined with the principle of effectiveness and feasibility, the selected evaluation content is: (1) theoretical examination, (2) the technical evaluation and standard test. In the theory teaching of experimental group, the teacher has the management qualification of the network curriculum, and can adjust the contents according to the students' learning process, and guide students through the athletics network course [3]. The teacher hold the post of organizer, director and supervisor in technology practice, and arrange a person who responsible for the practice according to schedule, the teacher's task is guide the students through the network platform to students' feedback information. Experimental class students all have the only user name and password used to login the network course, and learning independently according to the teaching outline, teaching material, teaching plan and material, discuss and interchange according to the question emerged during the study process, and carry out

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the interact between teachers and students, the teacher participate in the students' discuss and guide students to solve the problems in the course of learning. Discuss edition, E-mail, digital transceiver box, virtual classroom, chat, announcement, news and other network module are the bond that connect teachers with students and students with students [3].

2.2.3 Mathematical statistics

Using Microsoft Excel2003 to organize data of test and experiment results, and use the SPSS16.0 statistical software to statistic and analysis.

2.2.4 Questionnaire method

According to the study purpose and content, the author carried out the questionnaire investigation to experimental group, and examined the reliability and validity of the questionnaire after the design, distribute 65 questionnaires, retrieved 65, the recovery was 100%, and effective questionnaire 63 copies, the effective rate was 96.9%. Before issuing questionnaires, the author asked relevant experts to examine the content validity of the questionnaire, in addition to take heavy measuring methods for reliability test (r=0.873), the results show that the questionnaire had high validity and consistency.

Table1: body shape and quality contrast between experimental group and control group before experiment

Index	sex	experimental group	control group	P
height（m）	man	1.75±4.026	1.76±3.105	0.104
	woman	1.61±2.579	1.61±2.812	0.695
weight（kg）	man	71.00±3.647	70.43±3.178	0.453
	woman	50.58±2.205	51.15±2.248	0.632
100m（s）	man	12.22±0.367	12.18±0.314	0.107
	woman	14.39±0.331	14.40±0.285	0.524
1500m(s)	man	310.20±12.213	311.38±11.628	0.825
800m(s)	woman	171.88±7.337	171.81±7.884	0.486
Shot-put（m）	man	10.13±0.973	10.19±1.109	0.252
	woman	8.26±0.935	8.44±0.771	0.378
Vertical jump（m）	man	0.38±0.026	0.38±0.024	0.429
	woman	0.29±0.016	0.28±0.017	0.898
Trunk bent forward（cm）	man	23.51±1.317	23.65±1.306	0.888
	woman	21.99±1.391	21.99±1.375	0.949

Note: the men's shot 5kg, women's shot put 4kg, * shows significant difference (p< 0.05), * * shows difference is very significant (p< 0.01), the same below.

Table 2: theory knowledge, Technology evaluation and Technology standard contrast between the experimental group and the control group before experiment

Index	experimental group	control group	P
Technology evaluation（man）	42.71±9.469	43.45±9.279	0.946
Technology evaluation（woman）	39.71±11.110	40.26±10.722	0.683
Technology standard（man）	43.44±8.485	43.68±8.251	0.707
Technology standard（woman）	39.83±10.239	39.33±9.969	0.842
Elementary theory knowledge（man）	45.29±7.872	43.43±8.593	0.477
Elementary theory knowledge（woman）	40.83±12.764	38.85±10.883	0.097

3.RESULTS AND ANALYSIS

3.1 Test results And Analysis Before Experiment

In order to avoid the harmful effect caused by interclass difference, the author carried out a test before the experiment, the results show that boys and girls of every class didn't have significant difference in body shape, physical quality,

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technical standards, technical evaluation and basic theoretical knowledge, etc.

3.2 Learning Effect Contrast On Motor Skill

Throwing the contrast of the two teaching methods in skills assessment result, we found that students' skill evaluation and skills standard were all better than before (table 3).

In the technical evaluation, the boys and girls of experimental group are all superior to that of control group, and the boys' difference was significant ($p<0.05$), and the girls' difference was very significant ($p<0.01$).

In the technology standard, the boys and girls of experimental group are all lower to that of control group, but the difference was not significant.

The experimental results show that the learning and mastering effect of network teaching mode was better than that of traditional teaching mode. the reasons are:

Table 3: theory knowledge, Technology evaluation and Technology standard contrast between the experimental group and the control group after the experiment

Index	experimental group	control group	P
Technology evaluation（man）	83.22 ± 8.404	69.98 ± 5.609	0.003*
Technology evaluation（woman）	86.50 ± 7.791	73.41 ± 4.543	0.001**
Technology standard（man）	83.80 ± 9.089	85.53 ± 7.923	0.103
Technology standard（woman）	84.92 ± 8.742	86.93 ± 7.509	0.411
Elementary theory knowledge（man）	84.34 ± 9.588	75.33 ± 7.315	0.002**
Elementary theory knowledge（woman）	82.04 ± 9.715	74.00 ± 5.974	0.003**

Track and field network course offers an independent learning platform that is unconstrained by time and space, students can review or preview according to the requests of established study progress and outline and based on their personal learning ability, learning time and learning conditions, this does the people-oriented to a certain extent, adapted to the students' individuality demand in learning, no longer like the traditional teaching of track and field, which ruled out differences between the students and according to the same teaching plan, content and standard following the teacher's classroom arrangement for learning. In addition, network teaching mode that combined with vivid visual material and varied theoretical knowledge system is preponderate over the traditional teaching mode, which can not only benefit the establish of students' action representation, but more easily to form the correct technical movement, visibly network teaching mode in sports skills learning surpasses conventional teaching mode [8].

Although there didn't exist significant difference between the experimental group and the control group, technology standard of network teaching mode was not as effective as control group, the article analyzes the reasons for:

The main difference in the skill teaching process of Track and field between the traditional teaching mode and the network teaching mode is that: In the traditional teaching mode, the process of learning, practice and error correction are synchronous, that means the process of teaching and learning, learning and practice and evaluation and feedback were consistent in process in time and space, can stimulate the students' vision, hearing and sensory participate, but the process of learning and practice, evaluation and feedback in network

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teaching were separate, students built the enactive representation through video, pictures and animation of the network curriculum, and they practiced with established action representation, mastery of knowledge and technology principle, which makes it difficult to control the students' skill master process timely and effective by curriculum and teachers[8]. In addition, because of the effect of students' imitation ability, acquisition ability, self-discipline, enthusiasm and initiative, etc, it's no wonder that the technology standard effect of network teaching mode faded next to traditional teaching mode.

Thus it can be seen, we should make full use of the advantage of favor action master in the track and field teaching process of network teaching mod, and break through the limitations to technical standards, and take "complement each other, have complementary advantages" principle to improve the teaching quality and effect of track and field.

3.3 Contrast Of Theory Knowledge Learning Effect

From the theoretical examination situation (table3), theory knowledge result of experimental group was better than that of control group, boys and girls are all present very significant difference($p<0.01$). It shows that network teaching mode is superior to the traditional teaching mode for the master of theoretical knowledge.

From the contrast of the two groups on the answer situation: in track and field network teaching mode, the knowledge master is more extensive in experimental group than that in comparative group, and the understanding and grasp level are deeper and stronger, and the analysis of related problems is more comprehensive, the understanding of main technical point is more accurate, and control group students can not reach the effect [7]. Analysis the reasons for:

According to the characteristics of the network course of track and field, discuss section has the function of opening and sharing, each students' speech and review all can be browsed by all students. Students can carry out special discussion according to the problems encountered in the learning process, and achieve their aim of understanding the learning content through the cooperation process between each other, at the same time, can also communicate with teachers and experts according to the question, this kind of interaction model stimulated students' divergent thinking furthest, greatly improved the learning efficiency [5].

Track and field network curriculum has the characteristics of opening and sharing, not only enables students to get the needed information and resources in time, and endow the student a new experience, and no longer organize and transfer information with simply linear text and language style as traditional track and field teaching mode. Through browsing abundant network resources, the students not only expand the knowledge, but strengthen the understanding depth [3].

3.4. Contrast Of The Students' Physical Quality Before And After The Experiment

The measurement of the students' physical quality of the experimental group and the control group after the experiment (table4), the result shows that the 100 m, vertical jump and trunk bent forward of the two groups were prior to that of before the experiment, but the increase was not significantly; In addition, students' endurance quality and strength quality are declined, but the magnitude of the drop is not significant.

Studies shows that the improvement of the physical quality is inseparable with the

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characteristics of the item of track and field, and inseparable with students' exercises quality in class and the enthusiasm and the initiative after class. Thus it is not difficult to see that the two teaching mode are equivalent for the influence of students' physical quality to a certain extent, it needs further research to find which kind of teaching mode is more effective in improving physical quality.

Table4: body shape and quality contrast between experimental group and control group after experiment

Index	sex	experimental group	control group	P
height（m）	man	1.75±4.026	1.76±3.105	0.104
	woman	1.61±2.579	1.61±2.812	0.695
weight（kg）	man	71.05±3.556	70.55±3.121	0.335
	woman	51.67±1.786	51.85±1.791	0.588
100m（s）	man	12.16±0.331	12.14±0.288	0.161
	woman	14.25±0.248	14.30±0.198	0.550
1500m(s)	man	312.80±11.048	313.68±10.552	0.600
800m(s)	woman	172.96±7.911	173.33±7.270	0.425
Shot-put（m）	man	10.08±0.897	10.14±1.060	0.192
	woman	8.18±0.918	8.35±0.750	0.360
Vertical jump（m）	man	0.39±0.022	0.39±0.020	0.303
	woman	0.29±0.014	0.28±0.014	0.963
Trunk bent forward（cm）	man	23.75±1.012	23.93±1.068	0.643
	woman	22.30±1.282	22.23±1.150	0.800

3.5 Diagnoses Of Teaching Effect Of Experimental Group

Through the investigation of the experimental group students, we found that the students were satisfied with the network teaching mode and teaching effect (including 59 people very satisfied, four people satisfied, 2 people unsatisfied); The students showed great interests to network teaching forms (including 40 people very interested, 20 people expressing interest, five people expressing not sure); In addition, the support rate was high of student to carry on the network teaching (43 people chose very approval, 17 people agreed, 3 people said not sure, 2 people said does not support); The statistics of study places showed that the school computer room is the main place for student to learn(accounting for 91.21%), students who chose study in the Net Bar account for 7.19% of the total number, but students study with personal computer account for 1.6%; Through the statistics of the number to visit network course a week for students, we found that 81.34% of the students visit network course between 4 to 6 times weekly, and18.66% of the students visit the network course under four times weekly.

The results of the survey show that the athletics network teaching expand and enrich the time, space and sensory experience of students' learning and exchange. self-study auxiliary provided in and after class to students is the main reason that students were satisfied to the network teaching, and new teaching methods and means to make the students as the main body of the teaching activities to control the content and time freely, which makes the students more optional and free in the learning process, this is the other reason that students feel satisfied [3]. The students were satisfied to the open learning column, which indicating that this column promoted information accumulation during extracurricular study. Network teaching model of imparting knowledge is better than traditional teaching mode, but network course lacks of timeliness of control, feedback and evaluation of students' practice.

4. CONCLUSIONS

The effect of using the network teaching model is obviously superior to the traditional teaching

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mode for track and field teaching on students mastering the knowledge about technical action and theory, but In the aspects of reaching technical standard Slightly worse than. Network teaching of track and field course has the incomparable advantages with traditional teaching, providing rich and intuitive learning resources for students, and is beneficial to the students' ability cultivation of autonomous learning, active exploration and active practice, but the network teaching mode cannot completely replace the traditional teaching mode, lacking of comprehensive and effective control of technology practice teaching. We should continue to deepen the research of network sports teaching pattern and the theory of network teaching system, and promote effective control of the network curriculum for students' extracurricular practice and exercise, and further perfect network platform system function.

The experiments show that the experimental class students' physical quality change is not significant, the reason of which lies in the improvement of the quality of the body or not is inseparable with track and field sports own characteristics , student class exercises task completion quality and after-school exercise's enthusiasm and initiative. To promote the reform of sports teaching and improvement quality of teaching as the fundamental starting point, we should make full use of network teaching and routine teaching their strengths, establish a combination of interactive mechanism of network teaching and routine teaching, and follow the principle of "complementing each other's advantages", " enhancing effect, increasing quality, and promoting development".

The teaching experiment shows that the effect of track and field course network teaching is superior to the traditional teaching model in a certain range, but the network course is process have the main disadvantages is control separation of teaching and learning of outside class, learning and practice and feedback and evaluation, lacking of the instruction of scientific research method and complete teaching activity design. In view of the limitation、operability and feasibility of the athletics network teaching，some universities having certain teaching condition should gradually trial network teaching mode and further deepen and popularize.

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