

Research on Athletics Training Methods with the Modern Information Technology

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Abstract. Athletics is a sport with a long history, and it's also the major originated projects of a lot of classical theories and methods of modern athletic training. The use of modern information technology in the athletics training can help students develop positive action appearance and improve motor skills. Not only it can facilitate to breakthrough teaching emphasis point and difficulty point, but also enhance the complementarily of teachers. At the same time, it improve the students ' ability to analyze and solve problems and conducive to the development of students ' non-intelligence factors. So as to make students quickly master the technique and improve training performance.

Introduction

Currently, the sports training theory and methods there have been rapid developments in the world, a large number of new theories and methods are constantly supplemented, amended and even subversive exercise training, training theory and method of old and new has become a trend and a change of the trend. Under the broad application of modern information technology, traditional education faces new challenges [1]. The use of modern information technologies, and play to their strengths and abilities, and reforming the traditional teaching model in athletics, enhance athletic training accomplishments is that we must face.

The advantage of modern information technology in athletics training

Build the right appearance and improve motor skills. Sports training in the course of some technical movements are difficult to describe in words clearly. Use multimedia courseware on can easily to settlement these problematic problem, will complex of technology with slow lens or hold of way from different angle gradually show in students before, on can leisurely of explained a decomposition action of essentials, shows throughout action of full process, turn crawl action of key part, told deep, and told through highlight focus, help students understands action, formed concept, remember structure, and in brain in the established clear of action appearances.

Stimulate the sport interest and improve motivation. Multimedia training means varied, lively, can overcome past teacher demonstrations, while explaining the traditional training model, as well as psychological characteristics of adolescent knowledge, innovation, while creating good stories and emotional experiences, attract and keep students attention and interest, so that they can inspire students training enthusiasm to motivate the students training initiative.

Breakthrough teaching difficulties and strengthen the complementarily of teacher. Teachers with courseware in the of animation or images used slow action, and suspended, and replay, teaching means combines explained, and model performance out, full to analysis difficulties, of hard easy, deepened on action of understands, shortened has generalization process, faster, and more full of established up action appearances, such on highlight has on focus and difficulties action of master, improve has teaching effect, shortened has teaching process, thereby to students to more of autonomous learning and exercises of time, increased has each section training class of exercises density and strength.

Improving students ' ability to analyze and solve problems. Through a multimedia platform, students watched the correct technique, and then watch the live video of your completed action, by

contrast, teachers and students can get together for analysis. Using multimedia, can the courseware both on the right and wrong actions, allow students to read and think, think for yourself, self, avoid many common mistakes [2]. This quickly mastered action and cultivate students ' ability of observation and analysis.

Using of the Internet for information exchange. The greatest advantage of the Internet is the sharing of resources, on the Internet you can find the latest videos, pictures, information, teachers also can sign some sports sites and our peers, expert discussion on sports training and teaching reform, problems of courseware, and can also upload their own production of courseware, papers, interaction, sharing of resources, improve together.

Teaching experiment

Experiment group. Here we select all the members of the athletics team in the gallant as experimental subjects, teaching comparative experiments, took the usual training before the experiment artificially divided into all the members of the experimental group and the control group, each group of 17 people in these two groups is shown in Table 1.

Table 1 Experimental group

Group	Boys (number)	Girls (number)	Total (number)
Experimental group	13	4	17
The control group	14	3	17
Total	27	7	34

Comparison of experimental and control group before the experimental group. Taking into account the differences in choice of experimental internal validity and external validity of the experiment, so I test before the analysis of similarities between the two groups was investigated.

The qualitative analysis of the test group and the control group students are training as usual, it is artificially divided into two groups and, therefore, they there is no significant difference in health, physical function. Training, training in the two groups was about the same, the experimental group and control group, no significant differences in the proportions and the number of men and women. In our experiment, two groups are just different teaching methods, others are basically the same. Experimental internal validity to ensure that might damage reliability experiment proper control of extraneous variables, one is a regular training in addition to the experimental group and control group was chaired by the same teacher; second, the experimental group and the control group test, timing, format and other aspects are basically the same.

Prior to the experiment, the experimental group and control group members standing triple jump, shot put, 100-meter run of scores for pretest, testing results, in the experimental group and the control group achievement there was no significant difference in training. Qualitative and quantitative analysis, we can see from the above, before the experiment, the experimental group and control group has a high degree of similarity.

Experiment procedure and content. In this study use the standing triple jump, shot put, 100-meter run as a pilot project in situ, because all three respectively to reflect students ' explosive power, strength, speed, also accounted for a larger proportion in the entrance examinations of physical education specialty (totaling 55 minutes) and high technical content, such as the rational and appropriate use of multimedia training, improvement of students ' training results faster. Experiment amounted to 16 week, weekly training 6 days, experiment group weekly to school multimedia classroom for 2 times last 45 minutes of teaching, used multimedia courseware auxiliary training and general training phase combines of method, in training of different stage respectively Shi to multimedia courseware for auxiliary training, and according to actual training

situation will mobile computer with to training venues on students of technology action for scene analysis , as show in Fig 1. Controlled group is used general method for training, in experiment of last stage on students for test.

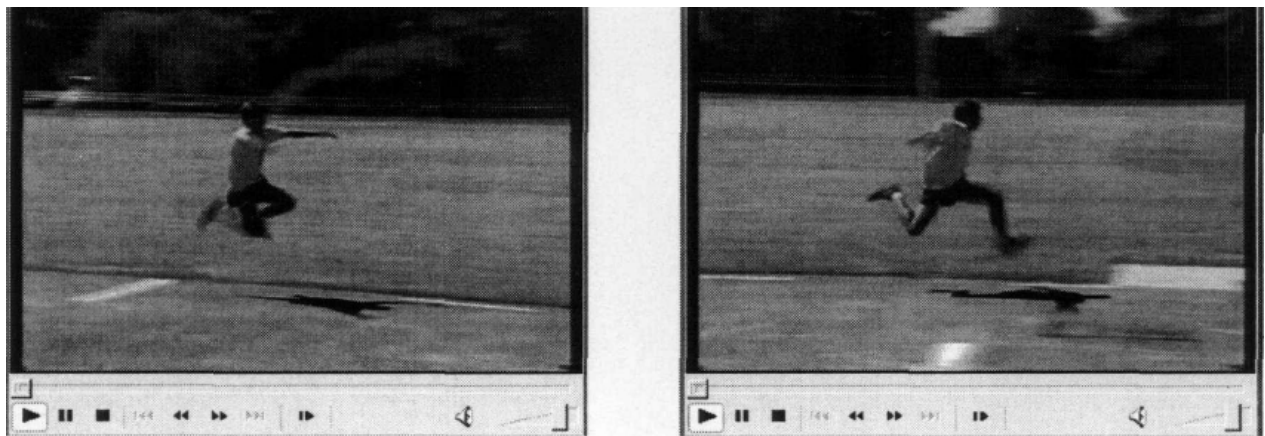


Fig. 1 Application of multimedia technology to triple jump training

Through respectively and with athletics training team of teachers and the experiment group members of interviews, can indicates that: in with General of method for training of while, using multimedia technology auxiliary training, conducive to help students established full of technology action concept; conducive to improve and improved action quality; conducive to on technology action of focus and difficulties awareness more thorough; conducive to maximum degree of played physical; conducive to improved errors action; conducive to quickly master correctly of technology action; conducive to reasonable of using and played technology action, Thus contributing to improve train performance. Multimedia Assisted Amateur Athletic training can integrate theory and practice closer together, through the T value test after test to prove its better than using conventional training methods. Test results in the following table 2.

Table 2 Control group and experimental comparison group pretest and posttest scores

Project	100-meter run		Standing triple jump		Shot put in place	
Results	Seconds		Meter		Meter	
Average	boys	girls	boys	girls	boys	girls
Control group pretest(Avg.)	12"67	14"75	7.61	6.35	10.37	8.46
Experimental group pretest(Avg.)	12"65	14"80	7.63	6.37	10.35	8.46
T Inspection results	$t=1.08 < t_{0.05} =$		$t=1.09 < t_{0.05} =$		$t=1.08 < t_{0.05} =$	
	1.986	No significant difference	1.986	No significant difference	1.986	No significant difference
Comparison group posttest(Avg.)	12"53	14"46	7.73	6.44	10.5	8.53
Experimental group posttest (Avg.)	12"40	14"55	7.9	6.63	10.62	8.72
T Inspection results	$t=2.56 > t_{0.05} =$		$t=3.08 > t_{0.05} =$		$t=2.76 > t_{0.05} =$	
	1.986	No significant difference	1.986	No significant difference	1.986	No significant difference

Conclusion

(1) From teachers' self-development for, multimedia technology means of application, does help upgrade teachers' business capacity, thereby promoting new courses reform smoothly, through using multimedia technology for its purpose auxiliary training, conducive to help students establish full of technology action concept; conducive to quickly master correctly of technology action, conducive to on technology action of focus and difficulties awareness more thorough; conducive to improve and improved action quality; conducive to maximum degree of played physical; conducive to improved errors action[3], Conducive to the rational use and play technique, that advantage would soon be reflected in the experimental group on the technical quality of movement and training of students' learning achievement.

(2) Media auxiliary amateur athletics training conducive to mobilization students training of enthusiasm; enhanced has correctly completed technology action of confidence; enhanced has hard training of wills; enhanced has on athletics of interest and hobby; enhanced has self analysis problem and settlement problem of capacity; strengthened has teachers and students Zhijian of Exchange communication[4], strengthened has students and students Zhijian of Exchange communication, full played students initiative; inspired students of learning passion.

(3) With regard to integration of multimedia technology and high schools amateur athletic training research, should be student-centered, as the carrier of multimedia courseware, information-centric platform to "humanity" as a concept of amateur training and integration of multimedia technology.

(4) Using multimedia technology to assist athletic training, to improve working efficiency, optimizing the training quality.

Suggestion

The school should enhance the application of multimedia technology and encouraged teachers to use multimedia technology in various competitions of sports class. Higher education authorities can organize their spare-time training of coach class train, teachers share new information, new training methods and various training experience by this way. At same time, physical education teachers should be able to use computer and multimedia teaching platform skillfully, and strengthen communication between IT professionals, then develop more suitable software and training courseware.

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