

Research on Operation Performance of Women Oriented Cross-country Teaching in College: an Empirical Analysis Based on Multimedia Computer

Luo Hong, Long Xiaodong*, Tao Ganchen, Long Jianjun, Wan Shaoyong and Chen Yuanping

P.E. Department, Jinggangshan University, Ji'an Jiangxi, China

**Corresponding author: Long Xiaodong171761779@qq.com*

Abstract

With the development of computer multimedia technology, the new educational model, which is represented by the educational technology, has emerged in the field of education in our country. Sports' teaching is a participatory teaching and learning activities, also, the current network resources is relatively abundant, so that design and development of a multimedia network teaching platform is very necessary. In this paper, we test the performance evaluation of directional cross-country teaching by using multimedia. Result shows that college students will have significant advantage after using teaching media, both in weight, vital capacity, sit ups, and 800 meters. After the experiment, experimental classes get higher score than comparative classes in 100 meters directional cross country ability test. The application of computer multimedia is helpful in physical education; it can improve students' learning enthusiasm and the effect is remarkable.

Keywords: *Computer technology; Colleges; Multimedia teaching; Directional cross-country*

1. Introduction

With the rapid development of economic globalization and the rapid progress of science and technology, computer information technology, communication technology, Internet technology, visualization of the development of multimedia technology can be described as the rapid development, this modern technology has been deeply integrated into people's daily life. The emergence and development of new science and technology have brought about convenience to people, but also gradually, the influence and change people's traditional way of life [1]. With the development of computer information technology and multimedia Internet technology, human beings have entered a new era of knowledge and network. The reform and development of education, science and technology innovation level of knowledge determines the comprehensive national strength of a country and its ability to compete in the world. How to use the modern science and technology to improve and improve the contemporary education is a permanent research topic. Education informationization is the only way of education modernization, but also the important content and main symbol of education modernization. From the view of the technical attributes, the basic features of the educational informationization are the digital, network, intelligent and multimedia. Network makes information resources can be shared, the activities of space and time limit, interpersonal cooperation is easy to achieve. The application of Internet and the development and application of new multimedia technology provide a new way for modern teaching mode. The combination of the two comes into being, which is the carrier which is implemented in the teaching process. The multimedia network teaching has been

opened and interactive, and these are not compared to traditional teaching. It is famous for its rich resources and powerful functions. It emphasizes the process of the students as the main body. Multimedia network teaching platform provides students with a more intuitive visualization with real-time interactive learning platform. These are in line with the development of modern education and the direction of reform.

Directional movement originated in Sweden, "orientation" is a word appeared in 1886, meaning with the help of map and compass, areas through unknown areas. Orienteering is using map and compass, by foot to choose their own way, according to the map the marked sequence refers to various punctuation to field visits and punch, in the shortest time to reach all place standard is the winner. It has the characteristics of sports, intelligence, environment and interest in nature. It has the characteristics of game, competitive, mass and practicality in the social aspects. Its value mainly includes: fitness value, educational value, moral value, entertainment value, social value, economic value [2]. First is the Orienteering to quickly understand the map, with various icons on the map quickly and correctly reasonable road is where the key of Orienteering; followed by more of Orienteering map legend symbols, and very abstract and difficult to remember. In the past, teachers should spend a lot of time to explain and demonstrate, but learning effect is not too ideal. It can be seen that the study and production of computer graphics is very important to understand the image, especially in some technical aspects of the image, and we use text, images, animation, video and audio and other computer multimedia technology will be directed at the symbol, color and the actual image of the control, so that it is intuitive, realistic, vivid, concrete form, so that students can be clear and easy to understand [3-4]. Research is true and reliable, this paper mainly from the age, height, weight, sit ups, vital capacity, 800 meters, orienteering theory achievement and 100 meter performance orientation to analyze computer multimedia technology in college female students orienteering teaching effect.

2. Literature Review

Through the network survey, as far as far, in the network of the earliest origins of the United States has more than 60% colleges and universities to carry out the multimedia network teaching and the number of people learning through multimedia network is 3 times the speed of each year. The multimedia network teaching originates in the western countries, in contrast to the western countries, our country's multimedia network teaching starts late, the development is also relatively slow. In general, the time of teaching abroad through the multimedia network is far earlier than that of China, and the development of the multimedia network teaching technology is very fast.

The United States is recognized as the most advanced multimedia network education is the most advanced and most advanced countries, the United States as early as 1996 began to promote education in the establishment of the internet. Through a survey of the United States Department of education in the United States medium education institutions of multimedia network teaching survey, in 1998 to 2000 years, 1997 of the United States to provide a network of 1690 colleges and universities, the data accounted for 34% of the total number of colleges and universities. About 660 thousand students are registered and willing to carry out multimedia network teaching, the data about 11.6% of the total number of college students (about 14.3 million). During this period there has been some virtual university, which has completely put aside the traditional teaching concept, which is based on the Virtual University of Michigan, California University, American university network and Jones International University.

Wanliang (2011) use the network survey method, to our country modern physical education specialized network curriculum construction present situation to carry on the analysis [5]. The analysis found that the construction of the network course of physical education in our country is still in its initial stage, and the construction of the network course is relatively small, and it points out that the learning resources are rich, but the overall design level and the evaluation and feedback of the course are still to be improved. Using the questionnaire survey, Lvhu (2011) uses the questionnaire survey method to carry on the questionnaire survey to the University's Sports Multimedia Technology teachers, and found that the use of the physical education discipline in the university is much less than other subjects [6]. Yuejun (2011) pointed out the basic characteristics of network teaching, the significance of College Physical Education Network Teaching and other two aspects, and pointed out that the development of multimedia network teaching will change the traditional sports as the center of the system, teaching work will be more interesting, with real value. The direction of physical education will be integrated, scientific and technological development direction [7].

From the advantages and disadvantages of the two aspects of the advantages and disadvantages of the traditional sports teaching methods and multimedia network teaching of physical education in the teaching of the sports teaching methods are described, and the analysis of the traditional physical education and modern multimedia teaching in the teaching of the complementary advantages of physical education. Can and Lu (2011) through the modern computer technology: Computer Assisted Instruction Technology (CAI), web production technology, three-dimensional animation and virtual reality technology [8], streaming media technology in several aspects of multimedia network teaching in sports teaching technology application method is analyzed in detail. It also points out the advantages and disadvantages of the modern control network teaching in the application of physical education teaching. Brenton (2007) pointed out that the modern computer network technology provides a new platform for the University's physical education, which is the inheritance and development of the traditional physical education teaching [9]. Pitkajarvi (2013) through literature research and expert interview, the relationship between physical education and network education, whether the network education can be applied to physical education, and the future of the application of network education in Physical Education in the future, and so on, are discussed and studied [10].

This shows that physical education teaching with other subjects, there is a plan, there is a purpose, the organization of teaching students knowledge, improves student's skills and physical strength [11], to develop students' Ideological and moral quality of the process. Sports teaching and other disciplines have their own unique side, compared with other disciplines to pay attention to the students' mental and psychological training, sports discipline is more emphasis on students' physical, skills, personal training. Compared with other subjects, the characteristics of physical education teaching can be discussed from two aspects: teaching content and teaching organization. First from the teaching content, sports teaching are to impart knowledge of physical education, sports technology, sports skills for the main teaching content, which is the most fundamental purpose [12]. It is to enhance the students' personal physical education, physical education belongs to technical teaching, mainly for students' physical practice. And then from the teaching organization in terms of sports teaching in particular sports venues and schools in the outdoor natural environment, teaching needs a larger space, teaching process using different devices and venues. The number of classes in each class is less than a dozen people, each student's quality level, the ability to exercise a difference, the basis of the movement of the control is also different. In addition to the physical

education teaching is also influenced by the environment, so the organization of physical education has the complexity and diversity.

3. Research Object and Methods

3.1 Sample Source

The experiment time was from June 2015 to March 2015, and the location was Jinggangshan University, Jinggangshan University and Jinggangshan University. The experiment was divided into 2 classes (29 students) and the control group (28). In the experimental group, the teaching method of teachers' general teaching and Computer Assisted Instruction is adopted, and the control group is the same as the conventional teaching method.

According to the research objectives and tasks, through the library of Beijing Sport University and the University of Jinggangshan, Jinggangshan University sports college reference room, and use of Jinggangshan University Library CNKI, superstar Duxiu, Wanfang database, VIP database, Taiwan journal Science Degree on the database, Taipei Palace Museum online, Reprographic data by the National People's Congress, Chinese Social Science Citation Index and superstar library, founder of digital library, foreign digital library, China Digital Library etc. electronic books, collecting consulting a large number of Orienteering related literature and directional cross-country academic the. A lot of theoretical preparations were made in the early stage of the study.

3.2 Research Methods

Interview method: interview or telephone interviews with the leaders of the University and the direction of the cross country experts, to understand the experts on the direction of cross country training and teaching experience. Testing method: before and after the experiment of female college students age, height, weight, sit ups, vital capacity, 800 meters and directional cross-country theoretical results are tested, and experimental testing 100 meter performance orientation. Questionnaire survey: 57 students in the experimental class of Jinggangshan conducted a questionnaire survey, 57 copies of questionnaires, 57 copies, 57 valid, the recovery rate of 100%, the efficiency of 100%. To test the questionnaire reliability: the "retest" separated by 7 days on the part of the investigation were again questionnaire to test for stability coefficient. The correlation coefficient r was two, P value was less than 0.96. There is a high correlation between the two questionnaires, which meets the requirements of the investigation. Statistical methods: the data were statistically processed with P , $SPSS16.0 > 0.05$ indicated no difference between the two groups of data, $<0.05 P$ said that the two groups of data were statistically significant differences, $<0.01 P$ said the two groups of data has a very significant difference. Computer graphics design method: computer graphics (P303) is essentially the OCAD software to describe the process of the field map.

First new map file, adjust grid specifications and mapping scale; second import and adjust the template; once again portray campus, park and forest Orienteering map; the best is map decoration. Computer multimedia experiment design idea: the teacher designs a set of multimedia teaching and the practice of the directional cross-country technology study teaching method to combine the plan. Lead students to actively participate in the experiment and study, fully mobilize the enthusiasm and initiative of students learning, and promote the understanding of learning content and effect, to fully grasp the skills and knowledge of the skills, improve their ability to cross the road and results. Specific teaching practice and design ideas, as shown in Figure 1.

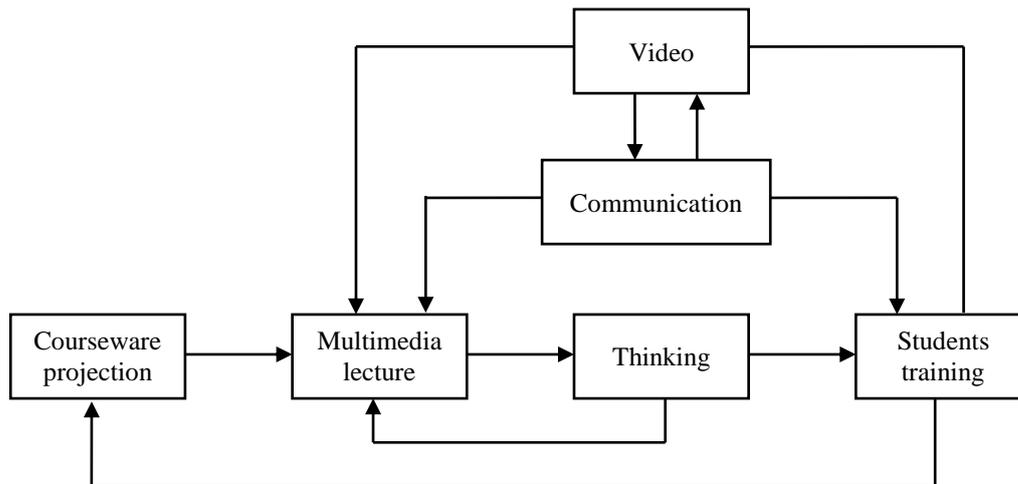


Figure 1. The Design Idea of Teacher's Multimedia Experiment

4. Empirical Analysis

4.1. Comparative Analysis of the Results

For authentic experimental effect, the experiment of experimental classes and that in comparative classes before the students' age, height, weight, sit-ups, vital capacity, 800 m and the theory of directional cross-country performance were tested and the statistics, by the SPSS statistical software to deal with, table 1 shows: age (experimental classes mean and standard 19.27 ± 0.70 , 19.43 ± 0.74 , that in comparative classes mean and standard difference = 0.16, $F = 0.638$, $P = 0.428 > 0.05$); Height (experimental classes mean and standard 158.84 ± 4.53 , that in comparative classes mean and standard 158.58 ± 4.42 , difference = 0.26, $F = 0.048$, $P = 0.828 > 0.05$); Weight (experimental classes mean and standard 49.27 ± 3.55 , that in comparative classes mean and standard 49.03 ± 3.97 , difference = 0.41, $F = 0.171$, $P = 0.681 > 0.05$); Forced vital capacity (experimental classes mean and standard 2914 ± 442 , that in comparative classes mean and standard 2867 ± 454 , difference = 47.00, $F = 0.130$, $P = 0.720 > 0.05$); Sit-ups (experimental classes mean and standard 31.51 ± 7.23 , that in comparative classes mean and standard 30.50 ± 7.21 , difference = 1.01, $F = 0.283$, $P = 0.597 > 0.05$); In experimental classes, 800 meters (231.51 ± 17.68 , mean and standard that in comparative classes mean and standard 229.53 ± 14.72 , difference = 1.98, $F = 0.211$, $P = 0.648 > 0.05$); Directional cross-country theory achievement (experimental classes mean and standard 46.89 ± 9.29 , that in comparative classes mean and standard 47.98 ± 9.20 , difference = 1.09, $F = 0.819$, $P = 0.369 > 0.05$); Difference and F values are close to zero, and P values > 0.05 , in age, height, weight, sit-ups, vital capacity, 800 meters and directional cross-country theory there is no significant difference between two class grades, visible equality of two classes of students the basic conditions, provide guarantee for the result of the experiment.

Table 1. Trial Result Contrast Analysis of Directional Cross-country (n=57)

indicators	Experimental classes(X±S)	comparative classes(X±S)	differen ce	F value	P value
Age (years old)	19.27 ± 0.70	19.43 ± 0.74	-0.16	0.638	0.428
Height (cm)	158.84 ± 4.53	158.58 ± 4.42	0.26	0.048	0.828
Weight (kg)	49.44 ± 3.55	49.03 ± 3.97	0.41	0.171	0.681
Vital capacity (ml)	2914 ± 442	2867 ± 454	47.00	0.130	0.720
Sit-ups (a)	31.51 ± 7.23	30.50 ± 7.21	1.01	0.283	0.597

800 m (s)	231.51±17.68	229.53±14.72	1.98	0.211	0.648
indicators	46.89±9.29	47.98±9.20	-1.09	0.819	0.369

Table 2 results show that the experimental class female college students before and after the experiment weight mean and standard deviation, respectively ($49.44 + 49.44 \pm 3.55$, 49.44), reduce the average 2.76 Kg, and statistics ($F = 10.414$, $P = 0.002 < 0.01$), the experimental classes before the trial, after the weight data has a very significant difference, this is because the directional cross-country course teaching can be very significant to mobilize the enthusiasm of students learning, consciously into the atmosphere of learning and exercise, reduce body fat and weight loss and cause; Forced vital capacity (experimental classes mean and standard $2914 + 442$, that in comparative classes mean and standard 3192 ± 431.55 , the average increased 282.00 ml, $F = 5.890$, $P = 0.018 < 0.05$), explain experimental classes experiment before and after lung capacity data have significant difference, this is because in directional cross-country course have a lot of fast running, jogging, and variable speed, makes vital capacity increase and cause; Sit-ups (experimental classes mean and standard 31.51 ± 7.23 , that in comparative classes mean and standard 36.79 ± 6.71 mm, the average increased 5.28, $F = 20.431$, $P = 0.000 < 0.05$), the experimental class experiment has a very significant difference before and after sit-ups data, this is because in directional cross-country course have a lot of project requires the waist abdomen strength, such as clock, turned and ran back, etc., make the waist abdomen strength ascension causes; In experimental classes, 800 meters (231.51 ± 17.68 mm, mean and standard that in comparative classes mean and standard 212.34 ± 12.20 , reduced the average 19.17 s, $F = 23.099$, $P = 0.000 < 0.05$), the experimental classes before the trial, 800 meters after the data has a very significant difference, this is because in directional cross-country course there is the main project will require a different distance running, such as hundreds of meters directional run fast run, run back and stop the launching, campus orientation run requires long distance running at a moderate speed, etc., makes the result in various running ability of ascension; Directional cross-country theory achievement (experimental classes mean and standard 46.89 ± 9.29 , that in comparative classes mean and standard 86.89 ± 10.30 mm, the average increased 40.00 points, $F = 240.977$, $P = 0.000 < 0.05$), the experimental class experiment before and after the directional cross-country theory achievement data has a very significant difference, this is because the required contact in directional cross-country course teaching and practice to a large number of relevant theoretical knowledge, and master the basic theory knowledge to practice sports, make theory achievement of ascension. Visible, female college students after experimental classes experiment, the weight, sit-ups, 800 meters and directional cross-country, theoretical results are very significant to improve lung capacity has a significant improvement.

Table 2. Contrast Analysis of Experimental Classes (n=29)

indicators	Experimental classes(X±S)	comparative classes(X±S)	differen ce	F value	P value
Weight (kg)	49.44 ± 3.55	46.68 ± 2.92	2.76	10.414	0.002
Vital capacity (ml)	2914 ± 442	3192 ± 431.55	-282.00	5.890	0.018
Sit-ups (a)	31.51 ± 7.23	36.79 ± 6.71	-5.28	20.431	0.000
800 m (s)	231.51 ± 17.68	212.34 ± 12.20	19.17	23.099	0.000
directional cross-country (points)	46.89 ± 9.29	86.89 ± 10.30	-40.00	240.977	0.000

Table 3 shows: that in comparative classes female college students before and after the experiment weight mean and standard deviation, respectively ($49.03 + 49.03 \pm 3.97$, 49.03), reduce the average 0.5 Kg, and statistics ($F = 0.223$, $P = 0.223 > 0.05$), and this is

because the key factors of weight loss is relatively complex, close on sports class is not enough, necessary to extend the classroom teaching to changes in extracurricular to have substantial; That in comparative classes female college students before and after the experiment lung capacity mean and standard deviation, respectively ($2867 + 454295 \pm 459.76$), the average increase of 84.00 ml, and statistics ($F = 0.437, P = 0.437 > 0.05$), and this is due to the changes in the lung capacity depends on often go running speed, running and trumpeting the tasteless without a purpose is a difficult to stick to and cause; That in comparative classes female college students before and after the experiment sit-ups mean and standard deviation, respectively ($30.50 + 30.50 \pm 7.21, 30.50$), the average increase of 2.25, and statistics ($F = 6.631, P = 0.013 < 0.05$), it is because in the course of the directional cross-country has caused many programs require the waist abdomen strength; That in comparative classes 800 meters of female college students before and after the experiment means and standard deviations, respectively ($229.53 + 229.53 \pm 14.72, 229.53$), reduced the average 9.82 s, and statistics ($F = 6.182, P = 0.016 < 0.05$), it is because the students have been very few 800 meters distance, improve the space is very big, in the teaching, as long as how to arrange the content of the middle-long-distance grades up soon and cause; Directional cross-country theory that in comparative classes female college students before and after the experiment results mean and standard deviation, respectively ($47.98 + 47.98 \pm 9.20, 47.98$), the average rose 31.31 points, and statistics ($F = 51.279, P = 0.000 < 0.05$), this is because the students to yearn for the understanding of the directional movement theory knowledge, teachers will students homework, class a semester down, theoretical achievements and lead to progress. Visible, female college students to that in comparative classes after the experiment, the directional cross-country theory achievement was very significant to improve, sit-ups and 800 meters have significantly improved, and weight and vital capacity increase slightly.

Table 3. Contrast Analysis of Comparative Classes (n=28)

indicators	Experimental classes($X \pm S$)	comparative classes($X \pm S$)	differen ce	F value	P value
Weight (kg)	49.03 ± 3.97	48.53 ± 3.93	0.50	0.223	0.638
Vital capacity (ml)	2867 ± 454	2951 ± 459.76	-84.00	0.437	0.511
Sit-ups (a)	30.50 ± 7.21	32.75 ± 8.01	-2.25	6.631	0.013
800 m (s)	229.53 ± 14.72	219.71 ± 14.83	9.82	6.182	0.016
directional cross-country (points)	47.98 ± 9.20	79.29 ± 14.31	-31.31	51.279	0.000

4.2. Directional Cross-country Performance after the Experiment

Table 4 shows: after the experiment classes and that in comparative classes weight mean and standard deviation, respectively ($46.68 + 46.68 \pm 2.92, 46.68$), the experimental class 1.85 Kg, less than that in comparative classes and statistics ($F = 4.051, P = 0.049 < 0.05$), it is because the computer assisted instruction can attract everyone's learning interest and hobbies, in the computer to find relevant information to prepare for practice and teaching from the classroom to extra-curricular, students' positive exercise, weight loss caused by fast; Experimental classes and after the experiment that in comparative classes lung capacity mean and standard deviation, respectively ($3192 + 3192 \pm 431.55, 431.55$), the experimental class is higher than that in comparative classes vital capacity, on average, 241.00 ml, and statistics ($F = 4.154, P = 0.0046 < 0.05$), it is because the computer aided teaching and routine teaching is better than conventional teaching can arouse the enthusiasm of students, can have the quality to complete the teaching mission, and directional cross-country course have mostly been run projects, especially occupied larger proportion of speed and cause; Experimental classes and that in comparative

classes after sit-ups mean and standard deviation, respectively ($36.79 + 36.79 \pm 6.71$, 36.79), the experimental class 4.04 , more than that in comparative classes and statistics ($F = 4.272$, $P = 0.043 < 0.05$), it is because the computer aided teaching and routine teaching than conventional teaching can make students have much more into sports, girls on their bodies look very heavy, can see in the computer is very good exercise the waist abdomen strength movement memory, and constantly improve their exercise in the exercise the waist abdomen strength and cause; Experimental classes and after the experiment that in comparative classes mean and standard deviation, respectively 800 meters ($212.34 + 212.34 \pm 12.20$, 212.34), the experimental class 7.37 s, less than that in comparative classes and statistics ($F = 4.210$, $P = 0.045 < 0.05$), it is because the computer aided teaching and routine teaching is better than conventional teaching can arouse the enthusiasm of students, in the study and practice more can show your own willpower, challenge yourself, to conquer yourself, complete in the long run effect caused by very high; After the experiment classes and directional cross-country theory that in comparative classes grades mean and standard deviation, respectively ($86.89 + 86.89 \pm 10.30$, 86.89), the experimental class 7.60 points higher than that in comparative classes, and statistics ($F = 23.248$, $P = 0.000 < 0.05$), it is because the computer aided teaching and routine teaching more can reach better than conventional teaching knowledge and knowledge, so that the students can have a system theory put knowledge into practice and memory. Visible, after the experiment classes than that in comparative classes directional cross-country theory achievement of female college students have a very significant increase, body weight, vital capacity, sit-ups and 800 meters have significantly improved.

Table 4. Result of Directional Cross Country (n=57)

indicators	Experimental classes(X±S)	comparative classes(X±S)	differen ce	F value	P value
Weight (kg)	46.68 ± 2.92	48.53 ± 3.93	-1.85	4.051	0.049
Vital capacity (ml)	3192 ± 431.55	2951 ± 459.76	241.00	4.154	0.046
Sit-ups (a)	36.79 ± 6.71	32.75 ± 8.01	4.04	4.272	0.043
800 m (s)	212.34 ± 12.20	219.71 ± 14.83	-7.37	4.210	0.045
directional cross- country (points)	86.89 ± 10.30	79.29 ± 14.31	7.60	23.248	0.000

Table 5 shows: the experiment mapping ability and weight without drawing ability female students mean and standard deviation, respectively ($46.84 + 46.84 \pm 3.78$, 46.84), drawing ability less than 2.26 Kg, no drawing ability and statistics ($F = 5.551$, $P = 0.022 < 0.05$); The experiment mapping capacity and vital capacity without drawing ability female students mean and standard deviation, respectively ($3367 + 216292$ $7 + 477$), drawing ability is higher than without drawing capacity 440.00 ml, and statistics ($F = 14.489$, $P = 0.000 < 0.01$); The experiment mapping ability and no sit-ups cartography female students mean and standard deviation, respectively ($39.42 + 39.42 \pm 4.43$, 39.42), drawing ability 6.92 more than no mapping ability and and statistics ($F = 12.717$, $P = 12.717 < 0.01$); The experiment mapping ability and 800 meters without drawing ability female students mean and standard deviation, respectively ($207.78 + 207.78 \pm 8.87$, 207.78), drawing ability less than 12.27 s, without drawing ability and statistics ($F = 11.671$, $P = 0.001 < 0.01$); The experiment mapping ability and directional cross-country theory without drawing ability female students grades mean and standard deviation, respectively ($88.15 + 88.15 \pm 8.53$, 88.15), drawing ability 13.29 points higher than without drawing ability, and statistics ($F = 13.323$, $P = 0.001 < 0.01$). This is because the drawing ability good students must spend a lot of time to visit and take photos, and will use OCAD photos in computer software effectively connected, and through the production to print out maps, there needs to be in extracurricular time consumes a lot of energy to practice and a lot of time to learn

computer software for OCAD cartography. Visible, the experiment drawing ability than drawing ability of female college students' vital capacity, sit-ups, 800 m and the theory of directional cross-country performance was very significant to improve, and weight has significantly improved.

Table 5. Result of Directional Cross Country about Mapping Ability (n=57)

indicators	Drawing ability(X±S)	No drawing ability(X±S)	differen ce	F value	P value
Weight (kg)	46.84 ± 3.78	49.10 ± 2.49	-2.26	5.551	0.022
Vital capacity (ml)	3367 ± 216	2927 ± 477	440.00	14.489	0.000
Sit-ups (a)	39.42 ± 4.43	32.50 ± 7.83	6.92	12.717	0.001
800 m (s)	207.78 ± 8.87	220.05 ± 14.29	-12.27	11.671	0.001
directional cross- country (points)	88.15 ± 8.53	74.86 ± 14.63	13.29	13.323	0.001

4.3. Female College Students' Ability of Directional Cross-country

Table 6 shows: completed hundreds of meters directional movement ability test scores can be seen in the experimental class scores on average is more effective than that in comparative classes grades better average time of 5.55 s, and statistics ($P = 0.000 < 0.01$) and after the experiment classes and that in comparative classes to complete hundreds of meters directional movement ability test result data has very significant difference, visible computer assisted instruction can significantly improve students hundred meters directional; Invalid result shows that experimental class is invalid result and that in comparative classes 2 invalid scores five people, including (unfinished test experimental classes 1 and 2 that in comparative classes; the order error experimental classes 1 and 2 that in comparative classes; dot leakage standard experimental classes 0 and 1 that in comparative classes), shows that after the computer multimedia teaching ability of experimental class student's understanding of map and image recognition ability, bearing is quick and accurate judgment, route selection decision is reasonable, the performance is significantly higher than that in comparative classes students. Experimental class female students collaborate 6.90% (2/29) than that in comparative classes collaborate 17.86% (5/28) is relatively low; therefore, directional cross-country using computer aided teaching effect is very obvious.

Table 6. Score Comparison of Directional Movement Ability Test (n=57)

indicators	n	Effective performance	differ ence	P value	Invalid scores	Not finished testing	Sequenc e error	Leak age
Experimental classes	29	45.68 ± 0.51	-5.55	0.00 0	2	1	1	0
comparative classes	28	51.23 ± 0.63			5	2	2	1

Table 7 shows: completed hundreds of meters directional movement ability test scores can be seen in the drawing ability scores female college students from the average is better than average scores without drawing ability takes 5.88 s, and statistics ($P = 0.000 < 0.01$), suggesting the experiment mapping ability and with no drawing ability test data has a very significant difference, female college students is to learn computer OCAD mapping can directional cross-country course is very significant to improve students' comprehensive ability; Invalid results can be seen that a mapping ability of female college students 0 and not drawing 7 female college students, drawing ability of female college

students errors was 0% (0/20) significantly lower than the mapping ability of female college students' errors was 18.92% (7/37), including (without drawing ability female college students test 3 person, unfinished game 3 order error; 1 dot leakage standard), computer OCAD mapping ability of female college students, first of all on judgment of map is very accurate, be able to read very high, generally will not run detours and leakage circuit, plus they want to get the drawing ability must walk from the classroom to to get outside, therefore, directional cross-country mapping ability of female college students' learning effect is very obvious.

Table 7. Score Comparison of Drawing Ability of Movement Ability (n=57)

indicators	n	Effective performance	difference	P value	Invalid scores	Not finished testing	Sequence error	Leakage
Drawing ability	20	44.59 ± 0.47	-5.88	0.000	0	0	0	0
No drawing ability	37	50.47 ± 0.68			7	3	3	1

Table 8 results show that the experimental class students in directional cross-country using computer teaching is suitable for the consent of the 22 people (75.86%), usually 7 (24.14%); In computer assisted instruction can improve the learning enthusiasm of agreed to 26 (89.66%), general 3 people (10.34%); In computer teaching, help to the understanding and mastering of directional cross-country 17 (58.62%), 11 (37.93%), and generally don't agree with 1 person (3.45%); In the computer aided teaching effect is good agree (65.52%) of 19 people, general 10 people (34.48%); In computer use is of great necessity and promote to 25 (86.21%), 4 (13.79%). Visible, is helpful for students to understand the problems in the process of computer technology in the teaching, improve the ability to analyze and solve problems.

Table 8. Teaching Effect of Students to Computer Technology (n=29)

Survey content	Agree(%)	General (%)	Don't agree(%)
using computer teaching is appropriate	22(75.86%)	7(24.14%)	0
Computer assisted instruction can improve the enthusiasm of learning	26(89.66%)	3(10.34%)	0
Computer teaching is helpful to understand directional cross-country	17(58.62%)	11(37.93%)	1(3.45%)
Computer aided teaching effect is good	19(65.52%)	10(34.48%)	0
Computer use is a necessity	25(86.21%)	4(13.79%)	0

5. Conclusion

After the experiment the experimental class and the control class are very significant to improve female college students' Orienteering theory achievement; experimental classes can be very significant improvement of female college students' weight, sit ups and 800 meters, was significantly increased in female college students' vital capacity; the control class can significantly improve from supine to sit and 800 meters, weight and vital capacity slightly improved. The female students in the experimental class than control class female college students are very significant advantages in orienteering theory achievement, in weight, vital capacity, sit ups, and 800 meters in a significant advantage; the experimental class control class female college students completed the 100 meter Orienteering ability test scores has a significant advantage, and the error rate is small.

After the experiment with drawing ability is very significantly increased than the drawing ability of female college students vital capacity, sit ups, 800 meters and directional cross-country theory results, and body weight increased significantly; after the experiment has ability of drawing and drawing ability female undergraduates completed the 100 meter Orienteering can force test scores have significant advantages, and the error rate is very small. Computer Assisted Instruction in the direction of the use of cross country teaching can improve students' learning enthusiasm, better and faster understanding and mastery of directional movement knowledge, the effect is significant, worthy of promotion.

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