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Practical research on the application of Orienteering in middle school endurance running teaching

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Abstract

Endurance running is the focus of physical education teaching in middle school. In the process of improving students' endurance running ability, teachers need to change the practice forms and methods of endurance running to improve students' interest in endurance running. Through practical research, many middle school physical education teachers began to realize the value of Orienteering in promoting students' physical and mental development, and gradually tried to carry out Orienteering in middle school physical education classroom teaching. However, there is no research on how to improve Orienteering so that it can be more effectively applied to classroom physical education teaching to promote students' interest in endurance running. Under the current situation, it is very necessary to carry out the research on the application of Orienteering in endurance running classroom teaching. This study uses literature, expert interviews, questionnaires, experimental research and other methods to conduct practical research. The results show that the application of Orienteering in physical education teaching can improve students' interest in practicing endurance running; Also, it can improve students' middle and long-distance running level and develop cardiopulmonary function and aerobic exercise level. In addition, it can promote the diversification of teachers' teaching methods. Moreover, it can promote the combination of physical education and other disciplines. Furthermore, it can promote the development and utilization of physical education and health curriculum resources.

Keywords: Orienteering, endurance running, Practical Research



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Introduction

With the guiding ideology of "health first" and the goal of building a "healthy China" in the "Fourteenth Five Year Plan" sports program, under the background of "double reduction", the sports discipline in Beijing, China also ushered in the reform of the secondary school entrance examination. Therefore, physical education is to reduce the ineffective activities in the physical education classroom and improve the efficiency of physical education classroom teaching. Under the background of "double reduction", it is explicitly required to reduce students' schoolwork burden and increase the time for extracurricular activities. For PE teachers, it is even more stressful in spring. The 800 meter race and 1000 meter race are still compulsory items in the physical education test of the secondary school. For many boys and girls, this project has certain difficulties. It is a project that teachers, students and parents attach great importance to. But the thought of repeated training and durable running is boring, and the effect is not obvious. Therefore, orienteering is used to teach students. Orienteering is both a kind of competitive sport and a kind of recreational activity. On the one hand, it can increase the interest of physical education teaching. On the other hand, orienteering requires long-distance running. Its aggregation and endurance running belong to the same group, and the sports ability system is similar to endurance running. Therefore, the application of orienteering in physical education teaching can improve students' interest in practicing endurance running; It can improve students' middle and long distance running level and develop their cardiopulmonary function and aerobic exercise level; Promote the diversification of teachers' teaching methods; Promote the combination of physical education and other disciplines; Promote the development and utilization of sports and health curriculum resources.

Methods

By using the methods of literature, expert interview and experiment were used. First, CNKI was used to consult the literature and books related to endurance running, orienteering, sports training and event group training theory, and then interviewed teachers and scholars with relevant experience. For the content that they wanted to study, they first conducted endurance running tests for boys and girls, and then conducted orienteering teaching and related activities. After a period of time, they conducted a second endurance running test for boys and girls. Use a manual stopwatch to time and compare the scores of each student in the first two tests..

Participant

The participants are 98 students in Grade 8. These students are the first students of the sports reform in Beijing's secondary school entrance examination under the background of double reduction. Therefore, it is very important to pay attention to the training of durable running through a variety of training methods, so as to provide a reference for the follow-up students to carry out sports teaching.

Population & Sample



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The professional electronic stopwatch used by physical education teachers in normal physical education classes is used, and the physical education teachers conduct manual testing by taking the class as a unit.

Instrument

For endurance running and orienteering practice and competition activities, electronic stopwatches are used for manual timing. The teaching and activities of orienteering adopt the equipment and equipment required by professional middle school students. On the one hand, it is to improve the ability and level of endurance running, and on the other hand, it is also to cultivate young talents in orienteering. The timekeeper is three PE teachers of the school. In order to be more accurate, one teacher acts as a referee and the other two teachers perform manual timing with an electronic stopwatch. If the difference between the two watches of the same student is less than 1 second, the results in less time will be used for recording. If the difference is more than 1 second, the average value will be taken. All teachers are experienced for many years. Therefore, the error will be relatively small, which can be referred to and recorded. At the same time, when the referee is also an accountant, it is necessary to avoid the problem that the electronic stopwatch chip is damaged and the timing cannot be normal.

Procedure

At the beginning of September, the endurance running test was conducted for boys and girls in Grade 8, and relevant performance data was obtained. Through consulting a large number of relevant literature, interviewing teachers and coaches with orienteering related teaching experience, the orienteering teaching and competition activities were conducted for about a month, encouraging students to participate actively, improving students' interest in sports, and enabling students to enjoy fun, improve their physique Sound personality and temper will. At the end of September, the second endurance running test for boys and girls in Grade 8 was conducted, and relevant performance data were obtained. Statistically compare the results of the first test with those of the students whose scores improved and decreased significantly in the second test, that is, those whose scores fluctuated beyond 10 seconds; As well as the students who have improved and decreased but are not obvious, that is, the relevant data floating within 10 seconds twice will be counted and analyzed.

Data Analysis

The data collection and statistics are carried out by establishing an EXCLE form through WPS. Because the number of samples is not large and the test items are only endurance running, the content is relatively simple. It is only necessary to make a comparison between the results of the two endurance running tests before and after a month of orienteering cross-country teaching.

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Result

This section describes the data obtained based on the data analysis. Tables and Figures should explain the results of the data analysis. Don't re-describe what's already on the table and the figures in the new paragraph.

Tables & Figures

Table 1. Changes after experimental intervention

No	Items	Description
1	Lift for more than 10 seconds	After the experimental intervention, 27.5% of the students improved their endurance running performance by more than 10 seconds
2	Lifting is less than 10 seconds	After the experimental intervention, 65.3% of the students improved their endurance running performance by less than 10 seconds
3	Descending for less than 10 seconds	After the experimental intervention, 5.1% of the students whose endurance running performance decreased by less than 10 seconds
4	Descending for less than 10 seconds	After the experimental intervention, 2.0% of the students had their endurance running performance reduced by more than 10 seconds

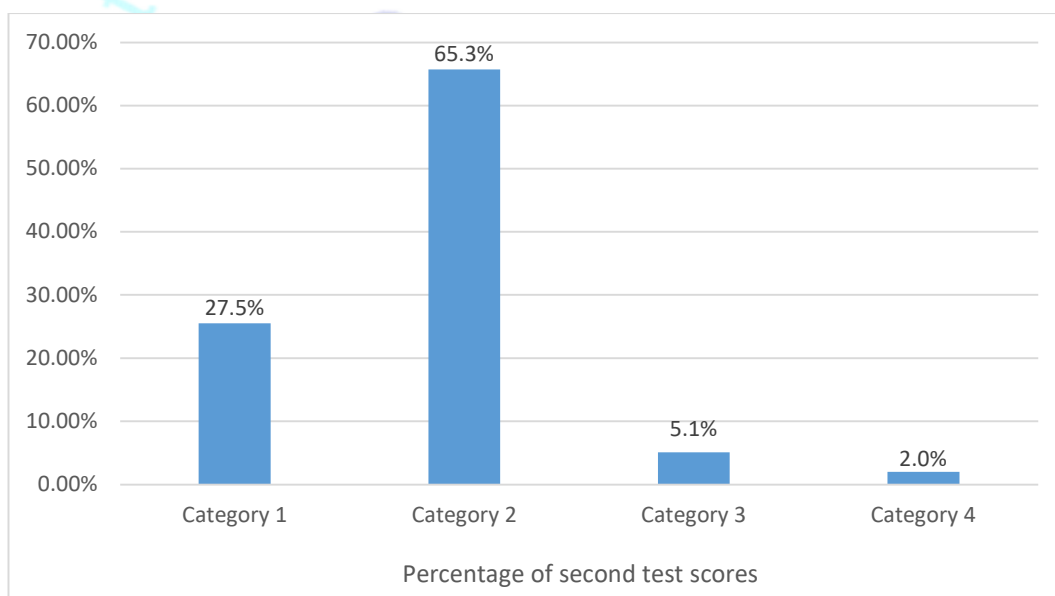


Fig 1. Graphic 1

Discussion

For many boys and girls, there are some difficulties in this project, which is a project that teachers, students and parents attach great importance to. The competitive event groups with similar competitive characteristics and training requirements are called event groups. The theory that reveals the competitive laws of different event groups and successfully organizes training and competition activities is called event group training theory. According to the event group training theory and the aggregation of the same event group, there are many cross-project studies on endurance running. In this study, "Research on the Application of Orienteering in Middle School



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Endurance Running Teaching", according to the characteristics of the event group training theory of orienteering, it belongs to the same event group as endurance running. Therefore, through orienteering teaching and activities, it has a positive role in promoting the improvement of the endurance running performance of boys and girls in grade eight.

However, there are not many students involved in this study, which can only represent the achievements of middle school students in Niubaotun School improved through orienteering teaching and activities at this stage. And due to the limited conditions, the teaching and development of orienteering still need to be further improved and improved. As there is no teaching experience and activity experience of orienteering before, the teaching content, teaching methods, sports load, etc. for the age characteristics of middle school students need to be further studied and improved.

The follow-up research on improving the performance and sports level of middle school students' endurance running through orienteering teaching is still very worthwhile. The next step of research can continue to carry out orienteering teaching and related activities, can be applied to students in subsequent grades, and further study the effectiveness of orienteering in improving the endurance running performance and sports level of middle school students.

According to the age characteristics of middle school students, the training adaptation law of human function and the load bearing capacity, combined with the characteristics of the durable running project, the training principle of giving students appropriate load stimulation and timely supplementing the physical and mental fatigue generated in student training after load. When applying this principle to orienteering, it should be noted that orienteering is a combination of physical strength and cognitive ability. Students should not only bear physical load, but also often bear a great psychological load in training. Compared with endurance running, orienteering has a higher comprehensive ability.

Conclusion

1. Students are not athletes. Teaching guidance and training should pay attention to students' interest and stimulate students' interest when they want to improve their performance. The methods and means of event group training theory can not only improve students' performance, but also promote students' interest in sports, and promote students' understanding, understanding and participation in a variety of projects, so as to establish a positive emotional attitude and values for sports and health activities.

2. The results show that the application of Orienteering in physical education teaching can improve students' interest in practicing endurance running; Also, it can improve students' middle and long-distance running level and develop cardiopulmonary function and aerobic exercise level; In addition, it can promote the diversification of teachers' teaching methods.



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3. Moreover, it can promote the combination of physical education and other disciplines; Furthermore, it can promote the development and utilization of physical education and health curriculum resources.

4. Orienteering is an extremely important part of track and field sports, which requires relatively high intelligence and physical strength of athletes. Integrating orienteering into the teaching of endurance running can have a positive impact on the students' group endurance quality, strain ability, intelligence level, etc., increase students' interest in the teaching of endurance running, and effectively remove fatigue and boredom in traditional endurance running teaching, So that the teaching of endurance running can use more excellent teaching methods to complete the teaching tasks.

Acknowledgment

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References

田麦久.项群训练理论[M].北京：人民体育出版社.1998.06.

田麦久.运动训练学[M].北京：人民体育出版社.2000.08.

谷长伟.幼儿园内趣味定向活动的设计与实施[J].青少年体育,2018(09):28-29+39.

王翔.定向运动[M].北京：高等教育出版社.2009.07.

潘绍伟.学校体育学（第二版）.北京：高等教育出版社，2008.