

Research on the teaching principles and strategies of physical education in winter primary schools

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Abstract: Winter physical education in northeast China has always been a topic. With the onset of winter, it brings new challenges to the primary school physical education class. This paper discusses the principles of teaching flexibility, classroom safety, load moderation, student fun, and temperature adaptability to be followed in winter primary school physical education classes. In order to ensure the smooth development of winter physical education classes, meet the needs of enhancing students' physical health, and improve the interest of primary school students in winter sports, sports games and special courses can be integrated to comprehensively improve the teaching quality of winter primary school physical education classes. This paper proposes that winter physical education should be based on the interest group model; Use sports games to effectively stimulate fun; Improve quality and efficiency with special physical education classes; Broadening horizons with off-campus outreach is the teaching strategy of winter physical education classes. It is hoped that the content of this paper will have reference value for winter physical education.

Keywords: winter; physical education in primary schools; pedagogical principles; teaching

1. Preface

Winter primary school physical education teaching should not significantly reduce the quality of teaching due to objective reasons such as the cold winter climate, but need to innovate teaching, on the basis of following teaching principles, actively through the exploration of winter physical education teaching strategies to ensure the amount of exercise of primary school students, so that the amount of winter primary school students' exercise up to the standard and complete the teaching progress and arrangement of winter physical education.

2. Current situation of physical education classes in winter primary schools

The development of winter physical education classes is not as good as the other three seasons, whether in terms of the content of physical education classes, students' participation interests or the setting of class hours, among which the cold temperature in winter is the main restriction, and the winter road surface is slippery and accompanied by rain and snow. From a safety point of view, the school has reduced students' winter physical education classes for "fear of injury" and changed to independent learning, snow plowing, long-distance running or being occupied by other subjects in the classroom. Due to the single, boring content of winter physical education classes and students' "fear of cold" and "fear of freezing", resulting in a decrease in interest in winter physical education classes; Restrictions on teaching content lead teachers to experience burnout, believing that maintaining the status quo is getting the job done. At the same time, the economy of the northeast region is underdeveloped, the primary schools with indoor sports venues account for a minority, and winter physical education classes are more abundant than in primary schools with only outdoor playgrounds, and the imbalance of educational resources affects educational equity. Therefore, it is extremely important to explore the teaching principles and strategies of winter physical education.

3. The importance of winter primary school physical education

3.1. An inevitable choice to enhance students' physical fitness

According to relevant statistics, China's teenagers lack physical exercise, their physical fitness has

declined for 20 consecutive years, and the number of students wearing glasses ranks first in the world. According to the requirements of the Ministry of Education, primary school students should exercise at least one hour a day to ensure that their physical fitness and physical fitness are enhanced and improved. Then, the winter weather temperature decreases, and the outdoor activities of primary school students are significantly reduced, especially the first and second grade primary school students, which is not conducive to the physical health development of primary school students. Under the educational goal of improving students' physical fitness and meeting the standards, through scientific and reasonable winter physical education class arrangement, primary school students can promote blood circulation through appropriate physical activities, increase the oxygen content of negative oxygen ions in the body, and thus activate the body's immunity. Meet the needs of physical exercise and achieve physical health, and physical fitness is the basis for efficient learning.

3.2. Implement the important grasp of cultivating morality and cultivating people

In 2021, China proposed in the "Opinions on Comprehensively Strengthening and Improving School Sports in the New Era" that school sports is a basic project to achieve the fundamental task of cultivating virtue and cultivating people and improving the comprehensive quality of students. [1] Winter physical education is one of the important ways to implement the cultivation of morality. Cold weather brings challenges to students' will, and has a positive effect on cultivating primary school students to endure hardships and stand up to difficulties. Teachers carrying forward the spirit of the Winter Olympics in the classroom can burst out students' patriotism, national responsibility and pride. In addition, the classroom organizes collective movement, so that primary school students can form a sense of collective cooperation and team spirit, and form "we" instead of just "me" in the concept.

4. The analysis of the basic principles of teaching physical education in winter primary schools

4.1. Teaching flexibility

Winter physical education classes should be flexible in terms of teaching content, teaching time, teaching methods, etc., because the temperature changes greatly in winter and there will be wind and snow. Teachers need to form different winter physical education programs according to the specific situation. For example, if the temperature drops significantly, the warm-up time should be increased, the range of motion of the joints should be increased, and the classroom sports injury should be prevented; Windy or rainy weather needs to be transferred to indoor teaching, teaching courseware can be used to teach sports knowledge and spirit, sports injury protection explanation, or let students follow the parkour video to trot or jump in place to increase the interest of indoor physical education class.

4.2. Classroom safety

Physical education in winter must pay full attention to classroom safety, pay attention to the choice of student activity venues, relatively safe activity content, and cultivate students' safety awareness during class. Includes pre-class preparation activities and in-class safety and security. Warm up before class requires students to fully participate in the practice of freehand exercises, do a good job of wrist, ankle, knee, waist, neck and other joint activities, effectively avoid sports contusions, sprains. In addition, when exercising outdoors, it is necessary to avoid slippery and slippery falls, and the ice and snow pavement of the venue needs to be cleaned up in time, and beware of students falling or other external injuries during class.

4.3. Load moderation

From the physiological level, it has been found that with the increase of exercise intensity in a low temperature environment, the metabolic thermogenesis of various tissues of the body also increases, which is sufficient to balance the heat loss caused by the stimulation of the low temperature environment, so that the core body temperature and peripheral tissue temperature increase [2]. In outdoor physical education classes, teachers should set up students' physical activity exercise load to avoid sweating, colds and physical fatigue after excessive activity. The exercise load of students cannot be too small, otherwise the purpose of enhancing physical fitness and completing teaching arrangements cannot be achieved. Teachers should teach students to self-measure pulse rate to monitor changes in students' heart rate, starting from the class, the heart rate should gradually rise, do not peak

again in the middle and late stages of the course, and then gradually decrease. A heart rate of around 120 beats a minute indicates moderate exercise load; 100-120 times indicates low exercise load, and teachers can adjust exercise load and teaching content in time according to changes in students' heart rate.

4.4. Student fun

The richness of winter physical education courses has been greatly reduced, and students' interest in physical education has decreased significantly. Primary school life is dynamic, and if the classroom arrangement is rigid, students will lose interest in participating. Teachers can increase the integration of sports games and folk sports games (eagle catching chickens, jumping grids, etc.) into winter physical education classes, and increase sports competitions to increase students' interest in sports learning and avoid students feeling bored in physical education classes. Mobilize students' enthusiasm, they all say that interest is the best teacher, cultivate students' interest in winter physical education and enjoy fun, so as to improve the quality of winter physical education classes.

4.5. Emperature adaptability

Winters are long and cold outside, and some students are willing to curl up indoors and have a certain resistance to outdoor activities. Therefore, in winter physical education classes, teachers try to participate in sports activities as much as possible, which can not only cultivate the collectivist spirit of primary school students, but also use the group atmosphere to influence individuals and avoid some students deserting. The most important thing is that allowing students to participate in group sports and accept the test of cold weather can improve their physical adaptability and make the body adapt to the low temperature environment. Winter physical education is the best time to comprehensively develop students' physical fitness, enhance myocardial function, and improve the body's ability to adapt to cold environments.

5. Analysis of teaching strategies of physical education in winter primary schools

In the teaching of physical education in winter primary schools, teachers can organize hobby groups based on the above five principles to stimulate students' interest in outdoor sports activities. In the teaching mode of interest groups, sports games, special physical education classes, and out-of-school development are integrated to improve the quality of physical education classes in winter primary schools.

5.1. Based on the interest group model

Interest groups are the more active components of teaching methods, which can be integrated with other teaching methods to continuously improve teaching quality and enliven the teaching atmosphere. The so-called interest group refers to the division of a class into several interest groups based on the dimension of interest, and group teaching can be carried out in small groups. Interest groups avoid "one-size-fits-all" and let primary school students choose their favorite sports, which directly solves the problem of students' lack of motivation to learn. Generally, a class will have 4-5 interest groups, and teachers face the group to design teaching content, so that although the teacher's teaching intensity has increased, the student's learning effect has been significantly improved. Of course, if teachers want to reduce the intensity of teaching, they can integrate information technology into it, carry out dynamic demonstrations and guidance in front of groups online, break through classroom restrictions, allow students to learn anytime, anywhere, and the classroom is used as a place of practice, so as to achieve the combination of theory and practice. In the process of interest group teaching, teachers can talk less and practice more, here less talk is to be precise, to speak to students who do not know, to students who need guidance, to achieve the accuracy of guidance^[3]. For example, in the table tennis explanation, it is mainly for students to play first, guide students for the problems that arise, and other students watch and learn, so as to achieve the combination of individual guidance and overall teaching. For example, in the teaching of skipping rope, there can be large rope groups and fancy skipping groups, which are freely chosen by students. Even several projects can be carried out at the same time in a class, such as football, volleyball, basketball, shuttleball, etc., to meet the diverse needs of students. If students have more hobbies, they can join any group anytime, anywhere. All in all, group teaching can achieve the purpose of classroom atmosphere regulation and promote student learning.

5.2. Use sports games to be effective

Elementary school students love games, which is because elementary school life is active, curious, and enjoys all kinds of competitions. In order to allow primary school students to actively participate in physical education classes and actively carry out physical activities, teachers can integrate sports games before and during the winter physical education class. Pre-school sports games can be fun and attract students' attention; In-class games are about adjusting the atmosphere and making the class relaxed. Pre-class sports games can integrate eagles and chickens, two-person competition, jumping large ropes, etc., so that students can move before class and play a role in preparing for class. Of course, if students like it, teachers can lead students to do gymnastics before class, which can also play a role in enlivening the atmosphere, stretching the body, and stimulating qi and blood. Pre-class sports games can last for 10-15 minutes, not too long, otherwise it will overdraw students' physical fitness, which is not conducive to the next teaching. The lesson is mainly combined with the classroom content to integrate the game^[4]. Insist on about 10 minutes of sports games in class, not too long or take up class time. In order to stimulate students' local feelings, local folk sports games can be integrated into the sports game link, of course, it is necessary to choose a relatively simple form, or it is more suitable for classroom development after teacher improvement, and an improved version of sports games can be used to increase the fun of physical education classes.

5.3. Improve quality and efficiency with special physical education classes

The so-called special courses are the newly expanded physical education courses using innovative thinking under the original curriculum system. There are no very clear criteria and scope for features. However, the most basic requirement is that it must adapt to the season, follow the laws of students' physical and mental development, conform to the actual situation of students, and meet the needs of students. Campus snow football is currently in the hot development in winter, the earliest for mass sports, schools can take advantage of the existing natural climate conditions, organize students snow football competitions on the snow, form a sports activity content with winter characteristics, and increase the richness of winter physical education classes. In addition, some traditional national sports can be integrated into the classroom, which is also clearly written in the new curriculum standard to integrate traditional national sports into school physical education classrooms. As an important part of the special physical education class. Let primary school students participate widely, because national sports activities can easily awaken the feelings of home and country of primary school students, and let them form a sense of national pride. In the process of formulating special physical education classes, teachers can mobilize students' enthusiasm to let students participate in curriculum design, so as to fully exert students' imagination and cultivate students' rich sports hobbies.

5.4. Broaden horizons by expanding outside the school

Off-campus outreach, as the name implies, is to extend physical education classes to the off-campus environment, allowing students to change the environment. Primary school students are more lively and always curious about the new environment, which also determines that they carry out physical education learning in a familiar environment, and after a long time, students' interest is low, coupled with the influence of climate, there is a certain resistance to physical education classes. For this reason, schools can allow winter outreach activities to allow students to immerse themselves in nature. Off-campus outreach activities mainly include off-campus off-campus off-road and off-campus winter hiking. This gives students a good chance to adapt to winter life. In order to ensure the smooth progress of off-campus expansion, physical education teachers should be fully prepared, advise students to keep warm, set a good discipline for off-campus outreach activities, form a more detailed plan, and actively prevent some unnecessary risks. If the primary school has good off-campus resources, such as cooperation with a cultural and sports unit, it can transfer out-of-school outreach to such a unit, so that students can communicate with the masses at the social level and improve students' social adaptability. If the school is connected to the red cultural base, it can visit the red relics at such bases and carry out red physical exercise under the arrangement of the red unit. Primary schools should also get rid of traditional thinking, develop more such units, realize the life and socialization of primary school physical education, and provide the necessary carrier for the return of primary school physical education and the combination of physical education.

6. Summary

As the Chinese saying goes, "winter practice three nine, summer practice three volts", winter physical education can not only enhance students' physical fitness but also cultivate will, and realize the completion of the task of "cultivating virtue and cultivating people" in winter physical education classes. It is required that winter physical education classes should form a more systematic teaching plan, so that primary school students can also get moderate exercise in winter, so as to provide a guarantee for the healthy growth of students. In teaching, we should respect the role of students as the main body, encourage students to participate in the innovation of teaching activities, and improve students' awareness of independent learning.

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