

Research on Program Teaching of Children's Alpine Skiing

--A Case Study of Plow Sliding

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Abstract

With the improvement of people's living standards in China, more and more people are participating in skiing, especially after the application of the Winter Olympics, promoting children to participate in skiing has become a sports trend. Therefore, this paper takes children aged from 3 to 7 years as the research objects, comprehensively analyzes the physical, intellectual, ability and psychological characteristics, as well as the technical analysis related to plow skiing, and summarize the skiing strategies in line with children's teaching.

Keywords

Children's alpine skiing; Plow skiing; Teaching.

1. INTRODUCTION

With the rapid development of our economy, more and more children are participating in skiing. In order to make children learn better at this stage, in this paper, the physiological and psychological characteristics of children at this stage is analyzed, skiing program suitable for children at this stage is made, which provide references for the teaching of relevant professionals and teachers.

2. RESEARCH OBJECTS AND METHODS

2.1. Research Objects

In this paper, children aged 6 to 12 years as the research objects; the problems related to plow sliding research are scientifically analyzed.

2.2. Research Methods

2.2.1 Literature method

The documents published in relevant journals in the past 10 years are collected, analyzed and summarized systematically via CNKI, WMP and other channels. The research goal is set by analyzing and synthesizing the data of Google ScienceDirect, Web sites, etc.

2.2.2 Questionnaire method

Studying the physical characteristics of children and learning methods of children's plow sliding skill; ensure reliable and useful data for the preparation of this document.

2.2.3 Expert interview method

On the basis of the structure and contents of this research report, we can exchange opinions and consult with experts through interviews, telephone and e-mail.

3. RESEARCH RESULTS AND ANALYSIS

3.1. Characteristics of Physiological Structure at Child Age

3.1.1 Age definition of preschool children

According to the sub-stages of growth and development of children and adolescents, the adolescent hygiene divides human development into the following categories: infancy from birth to one year, early childhood (1-3 years), early childhood (3-6, 7 years) and early childhood (6,7-11,12 years). Adolescence (means 10-20 years old) young people (18-25 years old). Among them, child is the age group of preschool children.

3.1.2 Characteristics of joints

As the center of the motion system, the joints have the function of changing the central axis during motion. Its anatomical structure is similar to adults, but the joint surface has cartilage thickness, weak joint shell, thin external ligaments, tensile strength, thin muscles around the joint and their strength is weaker than adults. Therefore, the joint is flexible and unstable.

3.1.3 Characteristics of muscle

Preschool children have more water in their muscles, less protein and inorganic salts, and more intercellular water. In addition, muscles store less glycogen, leading to fatigue. Preschool children's nervous system does not adapt to muscles, and muscle endurance and coordination are poorer than in adults.

3.1.4 Characteristics of nervous system

The development of the cortical system of the brain in preschool children is uneven. Excitation processes are dominant and easily propagated. Rapidly changing excitation and inhibition have high degree of flexibility. Most children are active, unfocused, learn and master new motions quickly, but with many motions, inaccurate and lacking coordination.

3.2. Characteristics of Children's Psychological Development

3.2.1 Motivation for learning and training

Children's active participation in alpine skiing and successful learning is closely related to their correct and good motivation for learning. From the psychological perspective, motivation needs to be expressed. The coach need make full use of interest as a fixed motivation, so that the children can continue their ski training.

3.2.2 Perception and attention

According to psychology and pedagogy, children's perspective on things is universally inaccurate. According to experiments and observations, the time concentration is about 15 minutes for 5-7 years old, about 20 minutes for 7-10 years old, and about 25 minutes for 10-12 years old. 12 years old and above is 30-40 minutes. Therefore, coaches should plan the time and frequency of each sport reasonably, but not more than 2/3 or 3/4 of the concentration time, in order to ensure energetic learning, master and use skill.

3.2.3 Memory

Children's memory is primarily mechanical. Therefore, when considering the use of one or more skills, trainers should ensure that there is enough time and frequency to reinforce memory. Moreover, when necessary, hold appropriate demonstrations or combine them with videos in order to cause visual and verbal stimulation.

3.2.4 Thinking

Children's way of thinking is characterized by concrete images and the shift to abstract logical thinking. First of all, teachers should first master the skill motion and training methods, do more correct, easy and free demonstration to deepen the vision of the children.

3.3. Analysis of Plow Sliding and Problems in the Teaching Process

The basic techniques of alpine ski plow sliding are: stop plow method, plow straight slide descent, plow turn, etc.

3.3.1 Analysis of plow sliding skill

Plow straight slide descent is a method which flexibly uses the plow body open and close to control the sliding speed.

In practice, there are many errors and deformation problems, such as no knowing how to use force, no teaching links to guide children to open the plow plate. Children need to experience motion in order to open the anti-slip plow.

3.3.2 Skill problems in the teaching process

Plow turns are basic rotational skill; a plow is used to manipulate two snowboards, so that they turn on the surface of the snow.

When learning this sport, children must use the plow skill and all previously acquired skills, and consider the particularity of the new skill. Because beginners are not yet mature in skiing and body control, there is no basic sliding training.

With the long-term adoption of plow-turn skill and teaching methods, there is a considerable gap between plow-turn technology and modern advanced technology and teaching methods. At present, the skill, teaching methods and practice of plow turns are undergoing significant changes and developments in major international education systems. Children with plow turns do not know basic skiing and do not have basic skills, which leads to a comprehensive assessment of poor quality learning and ineffective learning.

3.4. Research on Countermeasures for Problems

3.4.1 Optimize the teaching process

3.4.1.1 The special preparation activities are incorporated into appropriate training modules and reduce unnecessary repetition. Special training was conducted after a teacher introduced the use, adaptability and wear of snow equipment.

3.4.1.2 Change the teaching methods of the plow stop method and vertical slide plow, effectively overcome teaching difficulties; students' control of the plow is improved when the plow stop pile method was adjusted to learning the plow straight slide. In practice, students can quickly learn the method of plow stop method.

3.4.2 Update teaching contents

3.4.2.1 Increase the teaching content of "basic posture" and lay a solid skill foundation

It can be said that the basic posture accompanies all skiers in their sporting life and is the foundation and starting point for all skiing skills. Once students have mastered the basic posture, they can save a lot of time in later classes. Teachers should no longer have to spend a lot of time explaining the initial body motions to students. Not only does it save time, but it also more accurately describes skills.

3.4.2.2 The concept of "four sports" has been added to increase students' awareness of all skiing skills. The "four sports" are backward motion, rotation, horizontal and vertical motion. For example, in plow teaching, students have a deeper understanding of the form of plow after adding and improving this teaching content, this can effectively improve plow motion due to ignorance and misunderstanding.

3.4.3 Innovate teaching methods

3.4.3.1 Teaching method of three-step plow straight slide descent board

The following three steps are mainly used to teach and practice the plow posture. Action: The first step, walk into the plow board pattern; the second step, jump into the plow board pattern; the third step, brush snow into the plow board action.

3.4.3.2 The resolution method of plow turn

Plow turn teaching is divided into three stages: shallow plow turn, basic plow turn and advanced plow turn, which can effectively solve the problems where skill is too concentrated in plow turn teaching, so it is difficult for students to accept a large number of skill contents in a short time, and help students gradually master it through four different levels of skiing skill description: shallow skiing, basic plow and advanced skiing.

With the development of skiing skills and training methods, the entire skiing process consists of three phases: the beginning phase, the management phase and the end phase, namely the turn phase "teaching method". Once the student has mastered the basic knowledge, the teacher can at any time give the student a curve to draw on the smooth surface of the snow in order to divide it into three phases, which contribute to skill education. These three stages divide the transition process into different parts, making the teachers more easily and accurately describe and explain what is happening in the transition process.

4. CONCLUSION

4.1 Due to the imperfect physical development of children, the training time should be reduced to ensure educational continuity.

4.2 Innovating teaching methods promote both children's interest in learning and the ability to use techniques and skills flexibly in practice.

4.3 Optimizing the learning process, reducing unnecessary repetition and thus effectively overcomes teaching difficulties.

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