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TRAINING PROGRAM OF THE SKI SCHOOL VUCKO

Abstract

The aim of this work was to present the Ski School "Vučko" skiing program with special reference to the typical mistakes that occur in the technique of skiing and exercises that are most easily corrected. The secondary goal was to determine the influence of the mentioned program of work on ski performance of attendants of Ski School "Vučko". At the beginning of the study, ski school attendants demonstrated the basic elements of the ski technique: downhill right, stalk plowing, wedge swing with and without stitch stick, basic curvature, turning to the slope, carving in the narrow and wide corridor. The student's technique was evaluated by three examiners (professors with ISIA license). The sample of children is 12 to 13 years of age who ski in the plume technique. At the end of the Alpine ski training, all respondents demonstrated eight ski elements in front of three independent examiners. The analysis result showed progress in all eight ski technique elements. All respondents switched from plow technique to a higher level of ski technique (parallel skiing). The basic skiing stance, the speed and balance control, the speed from one bend to the other, the position of skis in the bend are the elements that special attention has been paid to.

Key words: *ski techniques, T-test, Discriminatory analysis, wedge turn, parallel turn*

INTRODUCTION

The alpine skiing methodology is based on the settings of general pedagogy and on the knowledge of the sphere of alpine skiing technique, with many other factors influencing the learning process. Setting a plan where certain goals for a certain period of time, as well as a skiing program (methodology) depend on a large number of factors: from individual opportunities to beginner skiers, through material resources (equipment) to emotional and sociological factors.

The skiing program (methodology) should be flexible and simple, with particular emphasis on the importance and role of ski instructor. In order to make the concept of alpine skiing methodatics rational, the exercises and tasks that it is required to represent are elementary movements which, respecting the principles of systematic and gradual behavior, lead to the desired goal.

The ski school "Vučko" ski training program is in line with skiing programs in the region and beyond, designed to be upgraded each year, while respecting factors affecting quality and the development of alpine skiing. The program is flexible depending on the attitudes of school attendants. Exercises that make up the content of the program are intended for beginner training, though most exercises can also be used to train trainees who have already mastered the basic knowledge of skiing and want to move forward. Twenty years as there is a Vučko ski school, the rich experiences of a large number of teachers, both former and present, guarantee the quality of Alpine skiing.

METHOD OF WORK

Sample of respondents: twenty (20) participants of the ski school "Vučko", children 12 to 13 years of age.

Pattern of variables: right down, stopping plunging, wedge turn with and without ski pole, basic turn, turning to the slope, make turns in the narrow and wide corridor.

Objective of the research: To determine the effects of Vučko ski school program.

Research tasks: to evaluate the technique of skiers Vučko skiing school at the beginning and end of the program. The ratings range from 1 to 5 with the team that higher ratings mean better results. At the beginning of the study, ski school attendants demonstrated the basic elements of the ski technique. The technique of attendees was evaluated by three examiners (professors of Physical Education and Sports Professors holding an ISIA license).

METHODOLOGICAL CONCEPT OF LEARNING ALPINE SKIING SKI SCHOOL VUČKO

The program is designed so that skiers can make skis that can ski skis in the wedge and parallel position using traditional and contemporary ski technique. The Vučko ski school teachers are taught to be able to realize the program, and in a practical and efficient way, through a logical and simple methodical procedure, in a very short period of time lead the participants to an appropriate level of skiing technique. The program of the teacher is a good knowledge of alpine skiing technique and methodology, their development, current trends, possible changes in the future ...

The program content is recognizable and is a combination of Slovenian, Croatian, Canadian and Austrian ski schools.

7-day program for skiers-beginners:

• First day

Adjusting to skis and base positions

1. Exercises in a "place" (on a flat ground):

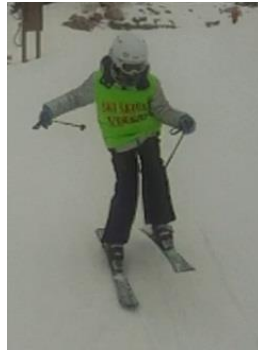
- The basic attitude to down right in place
- Movement of skiers along the longitudinal axis of the ski: back and forth
- Flexibility (vertical movement, from low to high position, flexion and extension in the ankle joint, knee joint, hip and upper body). The error is the position of the squat or the seat. Explain that the hips are moving vertically, knees are in the position as far forward as the elongation of the knee towards the pressure on the front of the shoe. In all the following exercises, insist on the position of the hips, knees, heels and arms.
- Side movements in place-putting ski on the heels
- Sunshine jumps: -drawing all the skis - "tails" of the skis: crossing the parallel skis - by tapping the "tails" of the skis: slipping into the position of the plauge
- Parallel overturning -walking motion
- Turn around: - the tops of the ski - the central parts of the ski - the "tails" of the ski
- Swing with one ski
- From the basic downhill position, right by spring, move to the boom position in the place

1. Exercises in Movement - Sliding (on flat ground):

- Walking from both skis
- Walking with one ski
- Down right-bypassing the stairs
- Downhand right-pushing with sticks with alternating plowing once and for another ski
- Skating ahead on one ski - pushing with the other leg (bachelor)
- Side-by-side climbing preparation

2. Movement-sliding exercises (very sloping slopes with slope):

- Movement-skating in the basic attitude-down right
- Down right in high, middle and low position (body weight equally distributed on both skis)
- Lower down the right one and the other skis in the downhill
- In the downhill right to lift the whole one and the other skis



Picture: raising a skis

- Downhill skiing (lifting all skis, raising tails) with dowel in parallel, plush and wedge position
- The right-to-move and sprinkler movement is in motion
- Downright right-breaking into a new trail
- Turn down right and left in downward right -parallel and scissor cut-off
- Down right with reciprocal plundering once and for another ski
- Down right, stick rods in the horizontal position - plunger stop
- Down right through a polygon with different tasks (pulling under a stick, moving over a coat of arms, different positions of sticks in your hands and the like

The plow position and the wedge position is a fundamental ski element. Because of the larger surface of the support, the position of the plow and the wedge allows greater stability of the skier, better, are beginning to adopt the movements of internal rotations of the upper and lower leg. Through the plunger position, speed control and stopping are made, which is for beginners of extreme importance from a psychological point of view, as they realize the awareness that they can control the movement. The plug-in exercises are exclusively related to stopping plunging and the wedge position is used when changing direction of motion. The advantage of turning on the clutch is the ability to control the speed of movement, especially during the transition period over the falling line. In addition, turning the clutch can be performed with a smaller radius, especially when using the side arch of the carving skis, which also contributes to speed control. Beginners who are more talented in motor sports will soon begin to pick up tails until they are placed in a parallel position. They should direct and encourage them. However, for the majority of participants, the methodical way of turning over the wedge is a better choice.

Plowing with stop speed control

- The plow position, by sliding speed (widening and narrower tails) by stopping
- Plain position with plunger stop
- Combine downwards with the right position, plunger and plunger stop
- Climbing the side and scissor step
- Exercises to change the direction of motion - (shifting the body weight to a single skis) wedge position

- Downhill right - move to the wedge position by shifting weight on one ski and knee insertion to make a turn in one side (outer-down skis should be on the heel).
- The same exercise-turn on the other side
- Connect wedge rotation
- Wedge position with a hand on the knee of the outside skis (ski to which the base is pushed, pressure on the inside of the skis by knee insertion inside), the other hand is in motion, start with the movement of the heavy body by the vertical.



Picture: wedgetur

Second day

- Repeat the program of previous days. Training on the use of lifts and lifts, increase of length of sections and slope.
- Wedge position with both hands on the knee of the outside skis with lifting arms at the release. Hands further push the lower knee forward and in. Lifting the hand will boost the vertical clearance so that it will make it easier to turn the skis while pushing the skirt downwards, tightens the skier's position, boosts the pressure on the ski, puts the upper body and shoulders in a correct skiing position and achieves a better balance with this position.



Picture: wedge turn with both hands on knee outer skis

- Wedge turn with the stick behind the back to control the position of the body. The stick pressed on the back will force the trainer to push the hips forward. This exercise is good for correcting the attitude of a beginner who is in a sitting position and this is one of the most common mistakes. In addition, the position of the staff member gives us the information about the position of the hips, the shoulder trot, so it is easy to make corrections.



Picture: the pule behind body

- Wedge turn with one stick (outer arm) in contact with snow and other stick (upper arm) behind the head or in the transfer. This exercise is used to correct the position of the shoulders, the body, the knees and the hips. Changing the position of the rod increases the movement of the body upwards.



Picture: under pule on the snow

- Superman's position is interesting and children are very happy to perform and quickly adopt. The lower arm is stretched in the direction of movement and the upper arm is secured to the hip. Exercise is excellent when correcting turn-offs, as stretching your lower arm forward and moving direction will make skiers easy to turn. Momentum change in arm position contributes to the relaxation and enhanced movement of the body by the verticals.



Picture: superman

Third day

- Repeat skiing techniques and exercises from previous days.
- Crack down and swing to the slope

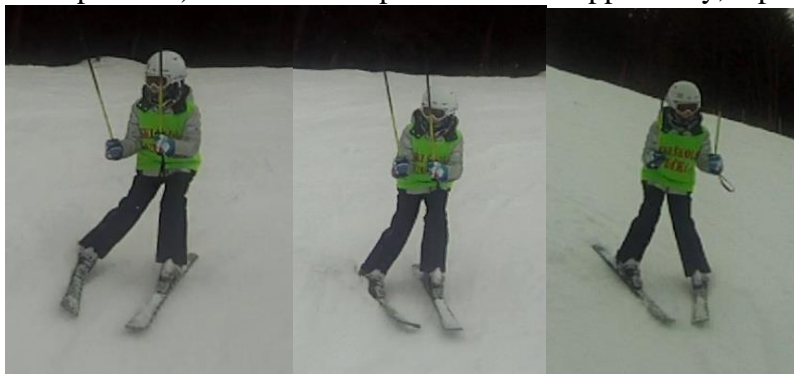
These two skiers are fundamental and should pay special attention to them. In our program they train together. There is a dilemma whether there is a downturn in modern skiing diagonal. It depends, among other things, on the angle at which the skis is placed in relation to the base. Since beginners use mild slopes and move at low speeds, their skis are not placed on the edges at a large angle (skiing is on the surface), which allows them to move almost straight along the width of the track. If the conditions are met: speed control and low slope, the position of the body in the shoulder should be relaxed, with the jargon termed "unlocked" relaxed hips position. It is common for the hips to lower the sitting or "defensive" position, so they rarely turn to the hill. Of course, if the skis on the heels at a right angle, parallel to the knees in the foreground and on the slope, and with the optimum pressure of the skis, it will make a swing to the slope without slipping. This is a very important moment for beginners because the feeling of optimum pressure and support on the bottom of the lower skis brings a new moment, which is safety and control of the balance. There is a problem with the speed control, because the skier gets an acceleration in the rudder, without slipping, which can lead to an imbalance and move the skiers back to the longitudinal axis of the skis. The skating of skis due to its shape and foreign port will, in the above mentioned position, make a turn to the hill but the beginner's speed of movement will be a problem. It is very important for beginners to train to emphasize the front part of the skirt more accurately. This will increase the knee pressure on the front and inside the ridges of the skis that will thus be easier to go outside with greater rotation and reversal which will make it easier to turn to the hill.



Picture: waiter

Fourth day

- Practice previously learned elements and move on to new ones.
- Wicked rotation with rods in the "window" position. This exercise potentiates to the correct arm position, (beginners make improper gestures with their hands, thereby disrupting the equilibrium dynamic position) at the corneal position of the upper body, hips and shoulders.



Picture: wedge turn with rods in the "window" position.

- Clinically swirling with imitation of wing wings, "birds". With this exercise we want to corroborate the vertical movement (up and down). It is very important to emphasize that the arms are constantly lowered and lifted to have a harmonized rhythm, steady pressure on the skis in the position of lowering the arm and the center of gravity and gradually lowering and controlling the entry into the turn.



Picture: bird

- Wedge turn with knee-stick rods (UPS-Na kanto). This exercise is used to practice rotation on the slope. Because of the position of the body forward and downward with increased pushing of the knee

to the hill and forward we have constant pressure on the skis which will make the skiing on the heels without slippery-spotting technique, which will consequently have a turn to the slope and stop.



Picture: water carrier

- Wedge turn with a hand on the bottom of the ankle, the second, the upper hand in the forward, in the direction of the skiing. With this exercise we want to correct the rotation of the upper body. Movement with the upper hand forward will stop the rotation of the body to the hill while the lower arm position will further push the hips to the hill, resulting in a sharper corner of the ski in the snow.



Picture: superman 2

- Wedge turn with the hand on the ribs in front of the body, the other hand in the movement or in the direction of movement.



Picture: under arm on the stomach

- Basic turn

The basic turning is skiing technique that combines wedge and parallel skiing technique. The basic rotation is performed by moving the body upwards to a higher position from the position of the trunk downstairs and starting the wedge movement, which implies weight transfer to the outside ski. When we get to the climax on the downhill line, ie when we shift the weight to the outside skis and the outside skis starts to turn around at that moment, we draw the inside skis and bring the skis to the parallel position. The continuation may be a turn around the slope or connecting the basic turnaround.



Picture: basic turn

Fifth day: Parallel Techniques

All the exercises we have used in training wedge techniques can also be used in training parallel skiing techniques.

Exercises to change the direction of motion - (shifting body weight to one ski) parallel to the position of the ski

- Parallel turn with hands on the knee of the outer (lower) skis with a vertical swinging hand. This exercise is used to correct the position of the shoulders, knees and hips.



Picture: parallel turn with hands on the knee of outsider skis with a hands down at the release

- A parallel turn with a stick behind the back controlling the position of the hips and shoulders. Insist that the stap is parallel to the base and is facing down the slope and in the direction of skiing.



Picture: parallel turn with ski pule behind the back

- Parallel turn with pule in the “window” position.



Picture: parallel turn –window position

- Parallel turn with ski pole in the horizontal position in front of the body with the poleturn at the moment of release.



Picture: ski poles up and down

- Parallel turn with the knee of the outside skis (skis with which the base was pushed, pressure on the inside of the skis by knee insertion inside), the other hand is in transfer.



- Parallel turn with the hand in front of the body (the palm of the ribs) is the other hand in the forward direction in the direction of movement.



Picture: arm on the ribs

- Parallel turn with the hand on the ankle of the lower skis, the second, upper arm in the forward, in the direction of the skiing.



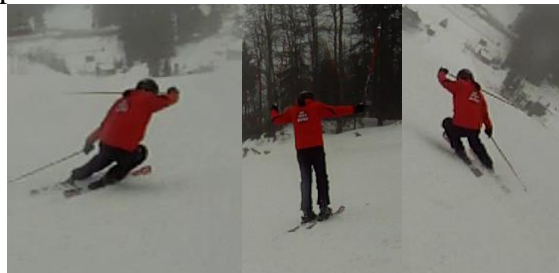
Picture: lower arm on the hip

- Parallel turn with the ski pole behind the head. Exercise to correct the body position forward. The rod should be inclined towards the bottom, which will lower the lower shoulder and push the knees and the hook to the hill. The result of such a position is skis at a sharp angle on the snow.

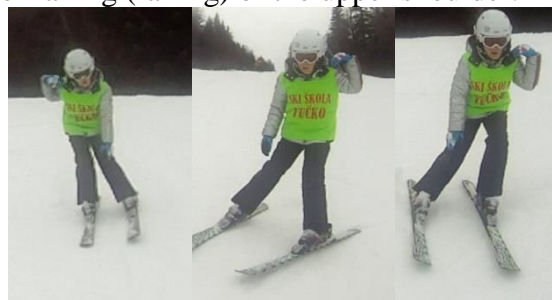


Picture: ski pole behind the head

- Parallel turn with one ski pole (outside hand-arm) in contact with snow and other rod (upper hand) behind the head or in the transfer. This exercise is used to correct the position of the shoulders, the body, the knees and the hips. Changing the position of the rod increases the movement of the body upwards.



- Parallel turn with the upper hand behind the head and the lower to the knee. By exercising, we overturn the mistake of falling (falling) of the upper shoulder.



Sixth day

Repeat and practice all the techniques from previous days. Try to ski by combining technique, (turning in rotation of the foot - try to make the other part of the turn by splicing technique).
- Swinging with thrust in ski puleand vertical lifting. Skiing with the use of ski pule, with connection of parallel turns with emphasis on movement of the body by vertical axis, up-down.



Picture: parallel turn with thrust in ski pule

- Aerodynamic position -downhill.



Picture: downhill

- Exercises for correction of motion and attitude. Binding the knee to make the skier move vertically upwards.



Picture: knee binding

- Exercise for motion correction and knee burning position in the narrow corridor.



Picture: aeroplane

Seventh Day:

Placement of diploma characters (symbolically) A, B, C, D;

- Competition: "Giant Slalom" (Strand slopes, track lengths, number of gates and their layout are adapted to the abilities and knowledge of skiers and beginners as well as weather conditions)

RESULTS AND DISCUSSION

Table 1 shows the results of the T test, ie whether there is a statistically significant difference and which are the variables that contribute to the difference between the evaluation of the skier student "Vučko" on initial and final measurement. By analyzing the data, we found that there is a statistically significant spatial distribution ($p = .00$) between all observed and evaluated variables (right down, plunging with stopping, wedge rotation with and without rod stitch, basic curvature, turning to slope, wrapping in narrow and wide corridor and the final score), meaning that the skiers of "Vučko" ski school after seven days of skiing training improved their skiing knowledge.

Table 1. Descriptive statistical parameters on initial and final measurement ski school students "Vučko"

	Mean - I	Mean - II	t-value	df	p
Down right	2,25	4,15	-7,92	38	0,00
The plowing	2,33	4,35	-7,92	38	0,00
The wedge without pule	2,27	4,00	-8,58	38	0,00
The wedge with pule	2,31	4,35	-8,23	38	0,00
Basic turn	2,40	4,10	-7,30	38	0,00
Turn to the slope	2,35	4,25	-7,92	38	0,00
A narrow corridor	1,80	3,05	-13,76	38	0,00
A wide corridor	2,35	3,55	-7,92	38	0,00
Evaluation	2,25	3,97	-8,77	38	0,00

Progress in skiing techniques can be attributed to the teachers who conducted the ski school program. This program is analyzed, verified and supplemented every year, and in previous research on the same subject had similar effects. Of course, the skiing training program of the inexperienced staff who is doing it probably will not have this success. In our case, the responsibility for implementing the program had teachers with many years of experience, teachers who possess ISIA licenses.

Discriminatory analysis

Table 2. Diskriminational analysis

	Eigen- - value	Canonicl - R	Wilk's - Lambda	Chi-Sqr.	df	p-value
0	5,830	0,923	0,14	67,24	6,00	0,00

Table 2 shows the results of the discriminatory analysis which determined the statistically significant difference ($p=0,00$) between the initial and final testing of the skiers "Vučko".

CONCLUSION:

Training Program of the ski school "Vučko" is programmed so that beginners from the level when they are hooked up to the climax (which is relatively fast to reach, since "the first stage of learning is quite selective and directed towards that goal"), until they learn the rhythmic parallel rotates by sprinkling, which is also the primary goal, new elements of technique are taught exclusively by skiing. Methodical sequences are such that exercises spontaneously complement each other. Of course, here are just some exercises that are used for the beginner

levels of ski technique. The aforementioned program gave the result because we tested it on the participants who skied exclusively on the initial test of the plush technique and on the final test they managed to skip the parallel technique with better speed control, a fairly fairer skiing attitude. Participants received quite a better rating in all test guards. Training Program of the ski school "Vučko" designed for advanced skiers and competitors is not present at this opportunity, we have planned this at the next congress.

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