# THE CONSOLIDATION OF THE SKATING STEP FOR THE PHYSICAL EDUCATION AND SPORT STUDENTS THROUGH A „UPBALL-SKATING" INOVATIVE GAME 

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#### Abstract

The paper started from the premise that by introducing in the skating lessons to students of the Faculty of Physical Education and Sport, a ball game with own regulation and specific conditions of deployment, better results can be achieved on strengthening the skating step and thus sliding on the ice, under conditions of changing the direction of the slide and the position of the body during the slide, but also the development of driving qualities speed and coordination.

The introduction of a game, with a ball in conditions of sliding on the ice, was a method by which the aim was to strengthen and achieve the skating step in everchanging and different conditions, created by both the opponent and the rules of the game. The game was introduced in the skating lessons after the basic training was done and all the students learned to skate. It initially unfolded as a game of motion, but in the process it required the development of rules to support students and to eliminate the danger of injury.


Introduction: The skating discipline introduced in the curriculum for $1^{\text {st }}$ year students of the Faculty of Physical Education and Sport, together with the other winter sports disciplines, carries out important tasks and objectives regarding the acquisition of skills specific to winter sports, aiming at the development of the ability to slide on ice as well as the development of the motor qualities directly responsible for it. The content of skating lessons, based on
the basic means, aims to familiarize students with the basic actions on ice sliding, the fundamental position, the basic skating step, the sliding into the fundamental position, the sliding by alternative step, the detours in specific positions, the braking, but also the multi-completed skating step, under conditions of adaptation and balancing of the slide.

Skating as a winter sports branch is aimed at a wide range of people of different ages who have a different level of physical training and involve a number of motor qualities such as coordination, balance, speed and not least strength. The attractiveness of this winter sport, both of figure skating and speed skating, continuously attracts practitioners from all social categories. Teaching skating to students of the Faculty of Physical Education and Sport ensures conditions conducive to the promotion and introduction of this sport in school, favoring its teaching in physical education lessons, where conditions permit. Skating by its recreational nature has particularly beneficial means, regarding the development of important psychomotor but also mental qualities at university and preuniversity level.

Following the indicative table containing some biological parameters of secondary and final selection according to , sport (branch), presented in the work Practice of Sports Medicine, by Ion Dragan, it is noted that the figure skating test lends itself to "psychological profile (motor coordination, skill, aesthetic sense), high medium waist, harmonious physical development, vestibular balance" ${ }^{1}$, and to the speed skating test " neuro-endocrine and metabolic support (anaerobic), psychic profile (reaction and displacement speed, skill, motor coordination), somatic profile (long and strong lower limbs, force especially boys in girls) ${ }^{[2]}$.

It can be seen from this presentation of the secondary and primary selection parameters that the most important indicators in skating are those related to the motor qualities coordination and speed, to the artistic skating prevailing the side of skill, coordination, balance
and body aesthetics, while in the skating speed, the most predominant would be the side of the motor quality speed of reaction and mouvement, as well as the skill or motor coordination. We could say that the game invented by us involves in addition to the speed of travel in the skating step and good motor coordination in relation to the actions of teammates and opponents.

Material-method: The following research methods were used for the preparation of the research work: the pedagogical observation method, the test method, the experimental method, the graphical and tabular method.

The experiment consisted in the application of the game on skates invented by us, in skating lessons, within the discipline Theory and practice in winter sports, to the $1^{\text {st }}$ year students, from the Faculty of Physical Education and Sport, who represented the subjects of research. In order to verify the concrete role that the game might play in the skating lesson, the subjects were divided into two groups, one experimental and one control. Among the students of the two groups, were selected to participate in the study, those who had already correctly mastered the skating step.

In the experimental group, we introduced the skate game invented by us at the end of each lesson for 20 minutes, while in the control group only the classical means and methods of teaching the skating step were used. In the beginning of the experiment, initial tests of the two groups were carried out on the speed, coordination and level of aptitude of the skating step.

Note that the same means of learning the skating step were used in both groups, in a logical order from easy to difficult from simple to complex, but in the experimental group was introduced in the last 20 minutes of the lesson, the game invented and proposed by us. In the control group was carried out in the last part of the lesson, sliding in the step of skating, with control on the correctness of the step and the position of the body, during 20 minutes.

## Means system used to learn the skating step for students of the Faculty of Physical Education and Sport:

The fundamental position on the skates, adoption of the fundamental position, passages from standing apart in the fundamental position (parallel skates, apart at shoulder level, flexed knees, torso slightly tilted forward, arms skewed downwards); The position is made at first from standing sideways with the hand supported at the rink rebord, then without support to the rink rebord.

Walking on skates in the fundamental position (knees remain flexed, torso tilted forward, torso slightly tilted forward, arms obliquely forward down). Walking is done first from standing sideways with your hand supported at the rink rebord, then without support to the rink rebord.

The skating step with the left foot (from standing sideways left, with the support of the left hand to the rink rebord. Perform a flexion of the knees, simultaneously with the twisting of the left leg with the tip of the skate towards the rink rebord, insert the left knee forward to fix the skate on the internal edge, achieve an impulse of it on the ice and continue with sliding on the ice, in the fundamental position, with parallel skates). Repeat forward past the rink rebord until impulse is learned on the left leg.

The skating step with the right foot (from standing sideways right, with the support of the right hand to the rink rebord. Perform a flexion of the knees, simultaneously with the twisting of the right leg with the tip of the skate towards the rink rebord, insert the right knee forward to fix the skate on the internal edge, achieve an impulse of it on the ice and continue with sliding on the ice, in the fundamental position, with parallel skates). Repeat forward past the rink rebord until impulse is learned on the right leg.

Alternating skating steps starting with the left, sliding into the fundamental position, skating step with the right, followed by sliding into the fundamental position. It's
run at first with rink rebord support where appropriate and then without rink rebord support. [1]

Alternating the skating steps with the left and the right, coordinating the skating steps with the swinging of the arms in the front plane towards the direction of the skating step.

The left skating step, with as long as possible on the left foot.

The skating step with the right with the right time to hold as long as possible on the right foot.

Alternate skating steps with keeping as long as possible on the left then on the right.

Slide in the direction of skating with emphasis on the length of the step.

## Results and discussions:

Tests applied in the study
Testing the sliding speed and coordination in an applicative skating step consolidation route

## Motor route to strengthen the skating step

1.Step of skating in a straight line for 5 m
2.Skating step with bypassing three poles
3.Skating step in a straight line for 5 m
4.Bypassing a pole and sliding in a straight line
5.Catching a ball and passing it by means of a choice of a colleague specially designated to pass from the side
6. Return to the starting line


The game invented by us, at first with simplified rules, and in the process after a stricter and more precise regulation, was highly appreciated by the students of the experimental group, who constantly collaborated with the teacher and even involved in establishing rules. Involving subjects in a ball game during the skate slide created an emulation and caused a state of continuous competition and self-exceeding among the subjects of the experimental group. [2]

The game, called upball-skating, is the subject of an invention patent application and is still in the process of perfecting the notions of deployment and regulation, which leads us to be reserved in terms of its description. We will, however, make a brief presentation to show what the current study consisted of. [3,4]

The game takes place between two teams of 7 players. The sports field on which you are playing is an ice surface, in our case it was on the artificial ice rink. To delineate the exact playing surface, 4 poles will be fixed in the rectangle, at a distance of 50 m long and 30 m wide, which will be bypassed by the players during the game, by sliding, in the direction of skating, i.e. the counterclockwise direction of the clock.

The team that starts the game and has possession of the game ball will sit at the start line and the other team at a line drawn 4 m away. The game starts as soon as the referee decides that all players are behind the starting line. Ball players will leave first, and players without the ball will leave at a time interval of 5 seconds. Players are allowed to pass the ball between them, with two hands or one hand, without dropping the ball on the ice. If the ball touches the ice, then the game is interrupted and the ball passes to the referee who puts the game back in motion. Players without the ball leave at a time interval of 5 seconds after those who have possession of the ball and try to intercept the ball. The team that manages to slide into the skating step and pass the ball without dropping it a lap of
the rink, wins a point. The game will be won by the team that gets more points.
Table of the results of the two groups when testing the speed of execution (in seconds)

Chart of the evolution of the two groups when testing the speed of execution

| Crt.no | Control group |  |  | Experimental group |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | Initial <br> testing(sec) | Final <br> testing(sec) | Initial <br> testing(sec) | Final <br> testing(sec) |  |
| 1 | 24.2 | 20.85 | 21.07 | 16.91 |  |
| 2 | 22.18 | 19.67 | 20.38 | 18.02 |  |
| 3 | 21.32 | 20.33 | 19.65 | 15.33 |  |
| 4 | 24.73 | 22.42 | 22.48 | 17.86 |  |
| 5 | 23.25 | 20.15 | 20.54 | 16.74 |  |
| 6 | 25.13 | 22.66 | 20.04 | 18.22 |  |
| 7 | 24.45 | 21.19 | 18.33 | 15.79 |  |
| 8 | 22.86 | 20.31 | 19.75 | 18.33 |  |
| 9 | 23.76 | 21.12 | 20.66 | 17.66 |  |
| 10 | 24.07 | 23.65 | 21.11 | 16.34 |  |
| 11 | 23.55 | 22.11 | 20.21 | 15.32 |  |
| 12 | 21.75 | 19.08 | 19.76 | 17.55 |  |
| 13 | 23.44 | 21.55 | 20.34 | 18.18 |  |
| 14 | 25.16 | 23.02 | 21.66 | 16.86 |  |
| 15 | 24.22 | 22.31 | 20.16 | 17.47 |  |
|  |  |  |  |  |  |



Table with statistical indicators of the two groups

| Statistichal <br> Indicators | Control <br> group |  | Experimental <br> group |  |
| :--- | :--- | :--- | :--- | :--- |
|  | T.I. | T.F. | T.I. | T.F. |
| $\mathbf{X}$ | $\mathbf{2 3 . 6 0}$ | $\mathbf{2 1 . 3 6}$ | $\mathbf{2 0 . 4 0}$ | $\mathbf{1 7 . 1 0}$ |


| s | 1.12 | 1.27 | 0.92 | 0.99 |
| :--- | :--- | :--- | :--- | :--- |
| cv | 0.04 | 0.05 | 0.04 | 0.05 |

Conclusions: Skating as a winter sports branch, is aimed at all school categories, regardless of age and level of physical training, develops important motor qualities such as coordination, speed of execution and balance, and involves the endowment of students with specific ice-slide skills.

Skating lessons constitute, by the nature of their outdoor deployment, attractive and useful forms of organization, in the sense of developing important driving qualities in students of the faculty of physical education and sport, such as coordination, speed of execution, dynamic balance and also provide support for new ice-slide skills, such as the fundamental position of ice slide, skating step, ice cornering, braking, etc.

The innovative game we called "upball-skating" arose out of a desire to diversify the teaching activity and especially for the purpose of strengthening specific skills, such as skating, bypassing, braking, steering changes.

After analyzing the results obtained by the students in testing the speed of execution, through the specific motor route of sliding on the ice, a much better evolution of the motor quality of the speed of execution was found in the experimental group, following the introduction into the lesson of the game invented by us (iceball-skating).

The results of the experimental group, compared to the results of the control group, clearly showed a better evolution of the students in the lessons of which the innovative game was introduced, they obtained a difference in the arithmetic mean between the initial and final testing, of 3.30 seconds, compared to only 1.24 seconds which was the difference of the control group from the initial test to the final test. [2]

These results have concretely demonstrated the role that the innovative upball-skating game has played in developing the speed of execution in the students of the
experimental group, and implicitly in strengthening specific skating skills.

## References:

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