

**A Lecture of the Bulgarian Ski School Association,
Kids Even-Bansko 14-17.01.2010**

**SYNCHRO SKIING – A METHOD FOR THE ACHIEVEMENT OF
PROGRESS IN THE SKIING SKILLS OF CHILDREN ON A
PREPARATORY LEVEL**

Authors: Kristyio Zgurovski, Petar Yankov

Key words: synchro skiing, basic skiing skills, timing and Alpine coordination

Every expert in snowsports seeks effective means and educative methods for the formation of Alpine skiing skills of children. This age is a key one because:

- children form their precompetative skiing skills;
- the initial psychological and physical profile is formed which allows for systematic goal-oriented preparation of children in Alpine skiing;
- the Alpine coordination starts being built;
- this age is appropriate for the development of basic qualities, which are skills that are necessary in Alpine skiing;
- some children give up skiing.

The otherwise traditional programs for education and training are various and have clear definitions in order to correspond to the specific age characteristics, such as:

- levels of education and methodological programs – including basic skills; methodological units; exercises and tests of techniques;
- a tactical program aimed at the formation of skills for skiing along gates by means of using auxiliary runs traced out with markers;
- physical and psychological preparation trainings;
- trainings of competitive type, using disciplines similar to the ordinary competitions.

The instructive character of the skiing lessons is present, because children learn the safety rules, acquire a number of socially significant values and other knowledge and skills which integrate them in the society of snowsports.

What we would like to attract your attention to is synchro skiing – the method by means of which the preparation of children can be further diversified, so that they get better and more confident on the track. We name it ‘a method’ because it can be used as a way to supplement the Alpine skiing skills that would enable the young Alpine skiers to have success in the higher levels. In addition to considering it an educative method, we think of it as ‘demo skiing’ or demo show, that is to say, as an attractive element for the promotion of winter shows, and last but not least, as a competitive discipline. We define the ride of two or more people in a synchronized, asynchronized, consecutive way or by re-forming with the term ‘synchro skiing’ (skiing in formation).

The goals achieved by the implementation of this educative method in skiing are numerous:

1. improvement of the technical skills: modeling of the effective style elements – stance, body position, directing the skis, control on the edging, timing, etc.
2. tactical skills formation: trajectory and speed control; situational orientation; distance orientation; memorizing the re-formings in synchro skiing; timing; skiing in bad snow conditions
3. psychological skills formation, such as: concentration; quick reactions; team spirit; motivation, etc.

Methodological guidelines for skills improvement by means of synchro skiing

In the part of the work which follows we present methodological guidelines for training in the three different aspects: tactical, technical and psychological.

Technical Aspect

The modeling of the style is the task which is most successfully performed by the run of two people in formation, synchronized in the rear. Here are some exercises of this kind:

- Half-snowplow turn in sequence – going in one trace, every person in the line repeats the same actions
- Half-snowplow turn in the rear (synchronized) – it is performed by two or three children. The aim of the exercise is to improve the control of the

outside ski edging and the un-weighting only by the legs forwards and upwards. The turns are performed in medium and longer radii according to a plan set in advance. The synchronized execution of the exercise contributes to the development of the timing of the actions in the different phases of the turn.

- Parallel turn – a slow demonstration in pairs:
 - o in sequence – children have difficulties with this exercise because due to the slower motions the dynamics of the turn is lost to a great extent. This requires, especially in the initiation phase, to rely mostly on the technical more subtle unedging, change of edges and transfer of weight. The run can be performed with or without planting the pole.
 - o in the rear – synchronization of the movements in the different phases of the turn. The pole work is a coordination task which is practiced with this exercise as well. Initially simulation of putting the pole to the side is performed, without the pole being planted, until the movement is acquired. Then the whole of it is performed, the timing of the action being much more easily exercised.

- Sideslip – synchronized

Aim: Perfecting the skills for subtle unedging, edging and weight distribution – front and back.

Description: in pairs one above the other holding a slalom pole in hands, going down the fall line and diagonally back and forth

- After the basic skiing skills are mastered, their synchronization in time and space is extremely important. An appropriate exercise for the purpose is, in our opinion, the short rhythmic turns performed in a synchronized and asynchronized way. In this case, the synchronization of the run of two or more partners with the same rhythm specifies children's style. The alignment in the formation horizontally (in a row), perpendicular to the fall line or vertically (in a column), parallel to the fall line, develops the children's orientation on the slope.

- Uphill turn

Aim: the performance in formation of the uphill turn to perfect the timing of the different phases of the turn. The effect of this exercise is related to the

easier direction of the skis and the possibility to choose the time to execute the carving control of the turn. The formation can be assigned different tasks, for example: initiation of carving control after the fall line, at the fall line and before the fall line. The participants in the formation are required to model their style in the conditions of synchronic demonstration. In the beginning the exercise is performed by two people, and the method gets more difficult when there are three or four partners in the group ordered in the rear.

- The combination of five short turns with crossovers perfects the timing of the transitions from short to medium turns. Two groups of children of three people each are arranged in parallel columns. They start with five short turns inwards, with a crossover at the fifth turn and continuing to the performance of three turns in a medium radius and a crossover. It is possible to do some transitions from short to medium turns in a single run.

Tactical Aspect

The tactical preparation of young skiers is one of the goals at this age. Skiing in sequence in a numerous formation develops “the observation of the run ahead” – the skill that the children will need in order to start skiing along gates. Distance orientation, trajectory control and speed are the other important tactical skills which are improved when synchro skiing is done. The memorizing of the re-forming in the combinations will help them develop the tactical memorizing of the run in the following levels of the preparation. When skiing in sequence is done without a plan of the run set in advance, after a coach, situational tactics are developed. This is extremely important in Alpine skiing which, as we all know, is done in unforeseeable conditions. Skiing in sequence with the rhythm and speed of someone else helps the development of specific skills for skiing in bad snow conditions. Skiing in sequence makes grooves during the run and prepares children tactically so at a later stage they could use the specific technique for skiing on tracks with bad snow conditions.

We suggest some exercises for the development of tactical skills by means of synchro skiing:

Exercises for control of the speed and trajectory of the run:

- Skiing in sequence of three or more children after a demonstrator

The aim of this exercise is the participants in the formations to learn how to control the speed and trajectory of the ride. The participants are expected to go down the same line of the person who leads.

- The next exercise makes the task more difficult because the children go down in two sub-formations, one above the other. The two subgroups go down in sequence one above the other, the run being synchronized between the two groups. It is recommended that the children in each group be three or four.

Exercises for space orientation. We suggest some exercises which can improve the space orientation of children:

- In sequence, two columns of three or four children each perform medium or longer turns. While going down, the two groups synchronize their turns in pairs, so that they make 8s (by coming close and going away).
- A column of two or three children making turns – short and rhythmic or in medium radius.
- Two or three children going in a row in short and rhythmic or in medium radii.

With these exercises we give significance to the different ways of arrangement - columns, rows, where young skiers have to execute different types of turns, keeping horizontal and vertical distance between the participants in the formation. The skill of the skier to observe the run ahead is formed with these exercises and this is a prerequisite for the easier realization of this skill in skiing on drill-grounds with markers or on ordinary tracks. The situational application of the skiing skills is also exercised with the different tasks when synchro skiing is used, especially in skiing in sequence when there is no plan of the run in advance (choreography). When we talk about a major tactical skill which we have to build with children, it is the optimization of the correlation between trajectory and maximum average speed. Practically speaking, the method of synchro skiing with its obligatory character contributes extremely to the development of this skill.

Psychological Aspect

The psychological preparation is formed parallel with the other aspects of the sports preparation in the training process. When the successful execution of the ride and synchro skiing depends thoroughly on the efforts of the whole formation, there

are good results in a psychological sense, namely: the team spirit is built. Although Alpine skiing is an individual sport, the creation of a strong team is a key prerequisite for the formation of strong personal characteristics of young Alpine skiers.

The formation approach in education leads to the fact that children do not think of other children as competition but as partners. This motive makes the team responsibility a personal one. The arrangement of the participants in the formation has to correspond to their personal qualities. Shy and timid children often avoid the front positions and the positions in the middle, and prefer those at the back. The coaches have to change their positions so that every one of them rides in all the different positions in the formation. The entertaining character of synchro skiing motivates children. When music is played and there are spectators who watch the children, they feel more excited and this forms their competitive disposition. Video recording of the performance and watching the videos in the brakes will influence the children in a positive way. The use of the synchro skiing method improves the different types of concentration and the speed of reaction – qualities necessary in competitive Alpine skiing.

Safety guidelines for the implementation of the method of synchro skiing

- Tracks that are closed or ones with restricted access of tourists should be used; the tracks should be at least 40 m wide;
- The participants should be arranged at a safe distance;
- The complexity of the tasks related to speed, crossovers, etc. should correspond to the level of mastery of the children's skills;
- The teacher/the coach should assess in advance the current condition of the snow, dangerous items on the track, the traffic of skiers and other factors which could influence the safety of the training.

Conclusion:

Synchro skiing is a method which offers various and challenging opportunities for the formation and improvement of the skills in a technical, tactical and psychological aspect. Its entertaining nature allows its successful application in the Alpine preparation of young skiers. The method offers the coaches numerous opportunities to create various combinations for the development of children's skills.