



***Special
Olympics***
British Columbia

Alpine Skiing Drill Book
Updated August 2008

Coaching Principles



STEPS IN TEACHING A DRILL

1. Introduce
2. Demonstrate
3. Explain
4. Organize
5. Execute
6. Correct
7. Practice

GENERAL PRINCIPLES

- Drills should relate specifically to what you are teaching.
- Athletes should be made aware of how drills relate to the sport.
- Drills should only be a part of your practice.
- Drills should be introduced at a slow pace and then gradually increased
- Drills should be accommodated for fitness, age and abilities.
- Drills should move from simple to complex. First perform drills that will help keep the interest of athletes.
- Drills should relate to the system of play that the athletes will use.
- Perform a variety of drills to prevent monotony.
- As fatigue sets in, technique deteriorates so provide frequent rest periods.

EXECUTION PRINCIPLES

- Review the drill procedure before practice so you know how it works.
- When introducing a new drill, walk a group of athletes through it so others can see how it is performed.
- Avoid talking too much, get the athletes performing, they will learn by doing.
- When errors occur, the drill should be stopped momentarily to correct errors.
- Praise those athletes doing the drill well and encourage those having difficulty.
- If equipment is necessary, ensure it is set up before so that progression from one drill to the next can progress smoothly.

Warming up for alpine is about becoming comfortable on the skis.

Proper stretching of the lower body is also very important.

As a group, work through a series of exercises on the skis. Follow these exercises with 5 minutes of stretching.

Warm Up for Alpine Skiing

Before putting skis on:

- Big steps in the snow
- Side jumps
- Knee bends
- Lunges

On skis:

- Rocking back and forth
- Lift tips of skis up.

Walking/Sidestepping:

- Walks with skis in a straight line
- Walks with skis in a circle
- Side steps on flat ground
- Side steps on gentle slope
- Up a moderate slope
- Herringbones up a slope
- Kick turn on flat ground
- Kick turn on gentle slope

Turning:

- Perform a wedge turn
- Perform a parallel turn with skis aligned on a gentle slope.
- Perform linked parallel turns.
- Perform carved parallel turns.

Wedge:

- Assume ready position.
- Put skis into a wedge position.
- Perform a controlled wedge down the slope.
- Emphasize lower hips and bending of the knees.

Include basic motor skill development in every practice. It helps to reinforce the movements used in the sport and to improve these fundamental skills. Pick 2-3 of these ideas for each practice.

Stance:

- Rocking back and forth on skis
- Bouncing on skis bending knees

Balance:

Basic Motor Skills

Understanding basic planes of balance: forward/backwards, lateral, vertical.

- Skiing with one pole.
- Skiing without poles.
- Skiing with poles stretch out horizontally in front.
- Skiing slowly over small bumps to practice balance.

Walking:

- Walking up the hill with straight skis.
- Walking up the hill with angulation.
- Walking with poles, without poles.
- Walking backwards.

Side stepping:

- Side stepping with straight skis.
- Side stepping with skis in a “V”



Weight Shift:

- Shift weight back and forth between right and left leg.
- Take small jump with the right foot, bring in left leg to join.
- Take small jump with the left foot, bring in right foot to join.
- Take small jumps with skis together and turn 45 degrees, continue until completed full circle.

Recovery skills:

- Getting up from a sitting position facing downhill, facing uphill and sideways.

Straight Run:

- Ability to ski straight down a slope.
- Assume ready position.
- Place hands on knees and keep head up.
- As you travel down the hill, allow skis to run straight.
- Keep eyes up and in direction of travel.

Pole Plant:

- The pole plant is used as a timing device to trigger the start of a turn.
- Carry poles with hands forward of the body at hip level, shoulder width apart.
- Plant pole by flexing the wrist. The pole should be planted forward and between the ski boot and the tip of the ski.

Technical Skiing Skills

- Use pole plant to trigger the weight shift.
- As the feet pass the pole basket, hands should remain forward.
- Shoulders remain level and do not tip inwards.

Edging:

- Visualize each ski as having two edges, the inside and the outside edge.
- Edge control is the ability to adjust the edge angle of the ski in the snow.
- As the ability of the skier improves, they should direct their efforts towards reducing skidding of the skis and increasing the carving through pressure on the edges.
- This will lead to more controlled and advanced turns.

Technical Skiing Skills

Turning: consists of 4 phases

Preparation phase:

- Skier is standing square on skis and has high body stance.
- Pole is planted to initiate start of turn.
- Weight is transferred from downhill ski to uphill ski.



Initiation phase:

- The moment the edge change is made to the inside edge of the uphill ski, the turn has been initiated.
- Tip: rotate the upper body in the direction of the turn. As the old edge is released, the lower body will follow the upper body.

Steering phase:

- Increased edging and increased pressure applied to the edge will direct the turning ski in the intended direction.
- Lowering the body will increase edging and pressure.

Completion phase:

- When skis have turned in new direction, decrease pressure and edging by elevating the body stance.
- The turning action should stop.

Remember: Weight transfer, steering, edge change and edge pressure!

Wedge/Snowplow:

- Point tips of skis inward.
- Spread the ends of the skis apart.
- Distribute weight equally to both skis.
- Look in the direction of travel.
- Bend knees and apply equal pressure to heels.

Parallel Turn:

- Plant left pole and shift weight to the right ski.
- Steer skis in wide track parallel through the turn to the left with weight predominantly on right ski.
- Traverse in the direction.
- Plant right pole and shift weight to the left ski.
- Steer skis through turn with weight predominantly on the left ski.
- Repeat until athlete can perform 5 carved parallel turns.

Alpine Skiing Drills

Forward Sideslip: emphasizes edging and pivoting.

- Start in a transverse position.
- Sideslip down a specific distance and come to a complete stop.
- Extend the legs, pivot and turn to be facing the opposite direction.
- Sideslip down the slope a specific distance and stop.

Single ski snow plow: emphasizes leg independence, angulation and edging.

- Perform a series of linked snowplow turns.
- Start with shallow turns and then begin making rounder arcs.
- Start placing more weight on the downhill ski during each turn until you can lift the inside ski.
- Return to a relaxed neutral stance before repeating.

Hockey stop: emphasize pivoting, edge control

- Begin in a straight downhill position.
- Quickly pivot the skis across the line of travel.
- Upper body should remain facing in the direction of travel, hands forward and hips pushing into the hill forming a strongly angulated position.
- Keep weight centered on skis and apply pressure on edge to stop.
- Practice by stopping on command at poles or markers.

The balancer: emphasize steering and pressure

- Skiers carry their poles horizontally out in front of their bodies.
- Perform a series of short radius turns with the aid of the poles for balance.
- The upper body should remain still and forward.
- Begin with shallow turns and progress to rounder turns.
- Strive for turns with rhythm.



High and Low tuck: emphasize balance, tuck and absorption.

- On a gentle slope, set up bridges using poles.
- Skier moves down the slope from a normal stance into a low tuck position in order to get under the bridges.
- Shoulders down, head looking forward, hands ahead with poles under the arms.
- High tuck will look the same just at a lower angle.

Obstacle Course: emphasize as many skills as you can

- Set up a course on a gentle slope.
- Combine side steps, pick-ups, skating, jumps, tunnels, etc....

Alpine Skiing Drills

Bumps and waves: emphasize forward and backwards balance

- Find rolling bumps on a semi steep slope.
- From a slow speed, ski over the bumps using legs to absorb the shock of the bumps.
- Stress relaxation, fluid movements and a quiet upper body.
- Legs should do all the work.

Hops: emphasize ski control

- Have athletes spread out and perform mini hops while turning.
- Skis lift off the snow while turning.
- Perform as many turn hops as it take to complete a full circle.

Follow the leader: chance to incorporate a variety of skills

- Have group follow you and imitate your actions.
- Initiate turns, tucks, short and long turns, jumps etc...
- Vary the terrain.
- Allow athletes to lead the group.

Gate Drills

Starts: Identify proper technique out of the gates

- Walk into starting gate.
- Prepare for starting signal with knees bent and body slightly forward.
- On go, push forcefully with poles while moving out of gate.
- Look ahead

Using Giant Slalom:

Turns should be approximately, 1.5-2.0 seconds apart.

A)

- Set a series of five to six gates.
- Allow athletes enough room to free ski simulating GS turns before the next five to six series.
- This drill is good for looking ahead and imagining and simulating GS turns before they occur.

B)

- Set up off set poles.
- Skier will have to visualize the need for more upper body balance.
- Turns should be round.
- Avoid breaking at the waist or ducking to avoid the pole.
- Turns are happening too late if this happens.



Gate Drills using Slalom:

Turns should be approximately 1 second apart

A)

- Set up poles for slalom type turns.
- This drill promotes preparation and initiation and completion.
- Pole plant is very important.

B)

- Have skiers ski with a glove or something between their thighs.
- This forces leg independence for the type of balance and muscle control needed in slalom type turns.
- Be sure glove is high and not right above knee

Practice Plan

Unstructured Free Play (10 min)

Prior to the practice athletes who have arrived early should be encouraged to participate in free play activities.

Warm Up (10-12 min)

Warm up should start with a light jog to get the athletes' heart pumping. Athletes should then gather to stretch, starting slowly and gradually involving all the muscles and body parts to be utilized in the exercise related instruction phase of the practice.

Basic Motor Skills (15-20 min)

Basic Motor Skills are defined as the very simplest movement skills (i.e. running, kicking, jumping, throwing, catching, etc). This phase starts with known content and progresses to the application of skill(s) resembling the game/competition, allowing athletes to fine-tune these basic skills to enhance the acquisition of sport skills. It should focus on one specific skill at a time. The combination of 2 or more skills will be encompassed in the next section.

Sport Specific Skills (15-20 min)

During this phase the athletes will combine several basic motor skills and practice the skills as demonstrated during the instruction. Emphasis should be placed on creating competition-like conditions (through game-like drills) during this phase.

Fitness (12-20 min)

This phase involved physical conditioning activities that are specific to the fitness needs of your sport. This is done by setting continual work/pause ratios (through circuits) for your athletes that stress the correct energy system(s). Fitness encompasses cardio, muscular strength, muscular endurance and flexibility.

Simulated Game (10-15 min; for team sports only)

During this phase athletes will compete in a competition-like setting to incorporate all the skills they have learned as well as the rules of the sport. Infractions should be called so that the athletes learn all aspects of the sport.

Cool Down (5-8 min)

Don't forget this portion. Cool downs are a vital part of a practice as they allow the heart rate to return to normal. Stretching should also be included at this time to prevent sore muscles the next day.

Evaluation/Tips (5-10 min)

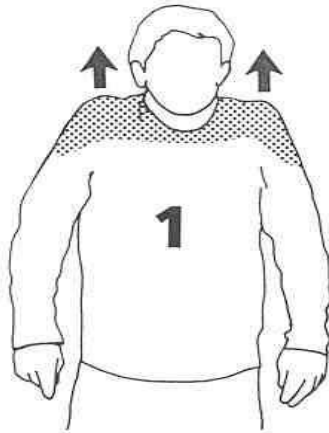
Evaluation is used to assess the effectiveness of specific activities or the total practice. It is helpful to spend a few minutes with your athletes at the end of a practice to get some feedback on the practice session. It can take the form of a 5 minute rap session about things that went well and things that the athletes and/or coaches need to work on. The topics discussed can be built into the next week's practice. All around training should also encompass nutrition and/or mental training so it is important to discuss these items with your athletes as well.

**NOTE: for additional resources, go to www.specialolympics.bc.ca and click on Resources

Before Skiing (Downhill)

Approximately 3 Minutes

Walk for 2–3 minutes.



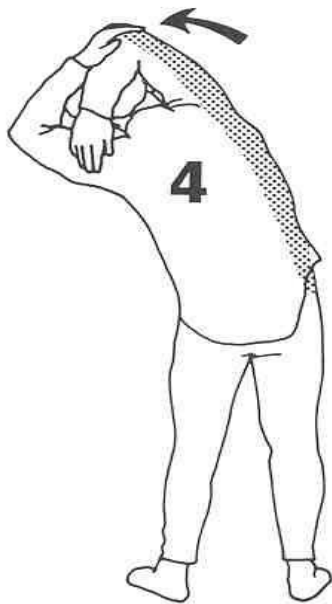
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2 times
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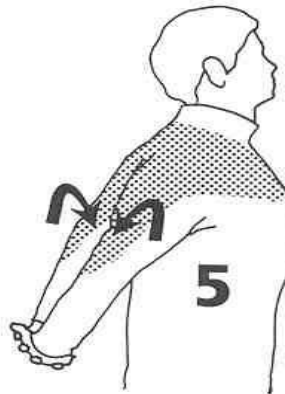
10 seconds
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10 seconds
each side
(page 81)



8–10 seconds
each side
(page 44)



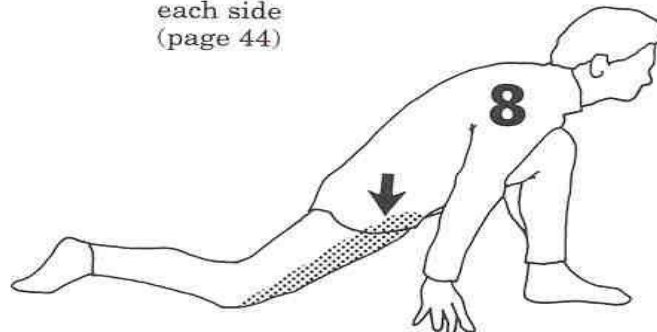
10 seconds
(page 47)



10–15 seconds
each leg
(page 75)



30 seconds
(page 55)

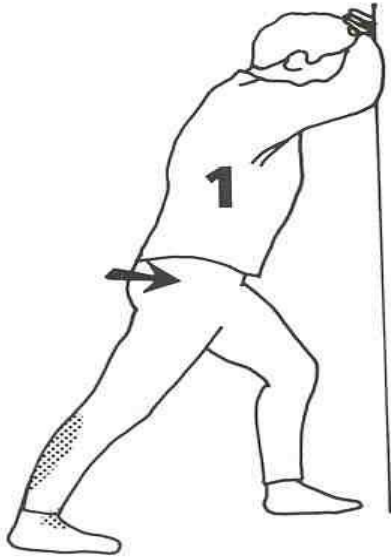


15 seconds
each leg
(page 51)

Short on time?
Do this mini-routine:
2, 3, 6, 8
Approx. 1½ minutes

After Skiing (Downhill)

Approximately 3 Minutes



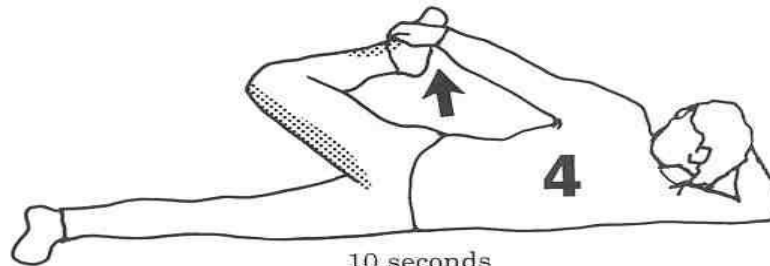
15-20 seconds
each leg
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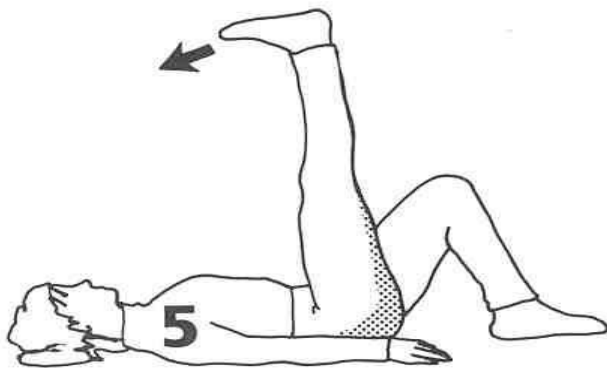
15-20 seconds
(page 58)



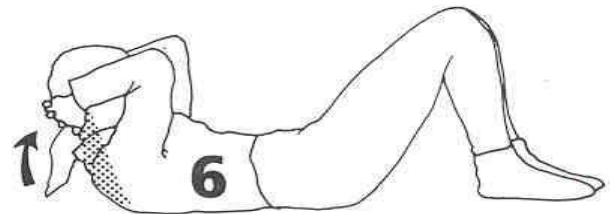
15 seconds
each leg
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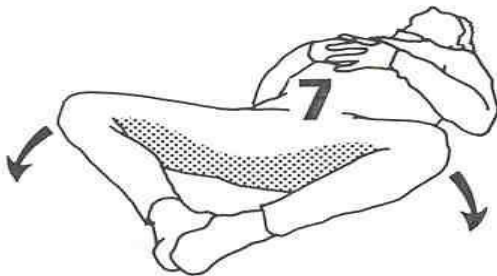
10 seconds
each leg
(page 36)



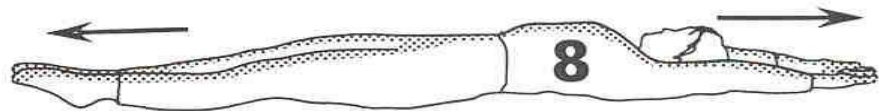
10 seconds
each leg
(page 58)



3-5 seconds
2 times
(page 27)



15-20 seconds
(page 26)



5 seconds
2 times
(page 30)

Short on time?
Do this mini-routine:
1, 5, 6, 8
Approx. 1½ minutes