

## **Off Ice Balance, Agility, and Co-ordination Training**

By Susan Ellis

Having a good sense of balance and being agile on your skates is an important factor in skating, especially in short track where you are constantly having to maneuver in a pack.

The best example of agility, balance, and coordination I have ever seen was in a World Cup race. Two skaters fell at the very exit to the corner and were lying on the ice at the start of the straightaway. Kaylena Roberge of Canada comes whipping out of the corner and rather than slam on the brakes, she does a flying leap, like a barrel jumper, over both skaters, lands in perfect balance as if nothing happened and continues the race!

Actually, skating is more about being off balance than being in balance as there is only a small portion of the stride, during the glide phase, where you are actually in balance. For the rest of the stride phase you are moving your body into unstable positions to load your push and to propel yourself forward. It is actually harder to teach people to move to an off balanced position than to be in a balanced position. That's why skaters may have trouble learning to lean to a point of instability during the weight transfer on the straights and to lean in the corner. Co-ordination is important to be able to move your body parts in the correct sequence of motion to move from balanced to unbalanced positions and then bring yourself back in balance again. It's about being in control of your body while you are out of balance.

Balance, agility and co-ordination training, besides being fun to do, can train you to become more aware of balance and how to effectively control being off balance. It can be done off ice, on ice, in the form of drills, or even by participating in another sport. Gymnastics, hockey, soccer, badminton, tennis, lacrosse, and martial arts are all great sports for promoting co-ordination, balance and agility.

Skating specific balance training off ice can involve anything from balancing in skating position on one leg on the floor, to balancing on a bench, on a 2 x 4 piece of wood, on a wobble board, or a Bosu ball. On ice it can be simple one-legged balance drills, slalom drills, hops or jumps, and backward drills to name a few.

It is extremely important, especially with younger skaters, to ensure the technical aspects of the drills are adhered to. For instance, if the drill requires the skater to be in basic skating position, make sure the skaters understand what the position is first and they understand this exact position is part of the drill, and it's not just a balancing act. Either demonstrate the drill yourself pointing out just a couple of the technical aspects, or find someone who can do a reasonable demo. It doesn't have to be perfect for them to get the gist of it. After a couple of tries at it themselves you will be able to pick out one or two skaters who can continue to be your demo skaters. As the athletes get better at the drills, you can add more technical points they must adhere to, then let them improve in those.

Start with simple drills and, as you or your group get better, you can add complexity either by varying arm, leg, body positions, or by varying apparatus from floor, to wide bench, 2 x 4 board, to wobble board. Adding a distinct one to two second pause to some of the drills, especially jumping drills forces the athlete to really use many of the stabilizer muscles in the foot, ankle, and legs.

All athletes, younger and older, enjoy change and challenge. Look for things in your training area you can incorporate into the training such as playground equipment, rocks, curbs, and even lines in the sidewalk or empty parking lot slots.

### Off Ice Balance Drills

- **Shifting weight forward and back** – In a glide/recovery position, start with your weight on your heel (on the glide leg) and your ankle angle open to about 75-80 degrees. Slowly allow your ankle to close and your weight to shift forward to the ball of your foot. The slower you go the more the ankle and foot muscles have to work to help you balance. Slowly return to the open ankle position and repeat several times. Then switch legs.
- **Shifting weight with small hop** – As above, allow your ankle to close slowly. Once you reach the closed ankle position, hold it for a second or two, then do a very small hop on the spot. Land with your ankle open and hold the position for a second or two before closing again.
- **Small hops forward with pause** – Same as above, but here you are taking very small hops forward and alternating legs as you hop. Remember, the two second pauses and closing the ankle slowly are important in developing the balance muscles of the foot and ankle.
- **Small hops forward no pause** – Same as above, but no pause on landing.
- **Small hops to the side** – Same as above but allowing your weight to shift slightly to the side and forward as your ankle closes. Start with very small hops to ensure you are in control on landing before moving to bigger hops and jumps.
- **360 hops** – In skating position: Start with a two foot small hop doing a ¼ turn as you hop. After you have control doing this do a ½ turn with each hop. Once you have mastered this you can do the same on one foot.
- **Dot drills** – Set up four dots about 18-24” apart in the shape of a square. Start with two feet and then progress to one foot. Jump to each dot and pause on landing to control your balance. You can jump in the shape of a square, an X, a diamond, or whatever.

### Bench Drills

Start with a low bench. As you get better at balance and control on landing you can make the bench a little higher.

- **Ups and downs on one leg**
  - Stand on the bench in a glide/recovery position, gradually straighten the glide leg (while keeping your chest down), and then slowly return to glide/recovery. This is a good strength drill as well as balance.
  - Same as above but do a small hop on the glide leg and land in balance.

- Same as # 1 but allow your recovery knee to drop below bench level, then go to a straightened position on the glide leg.
- Incorporate a small hop into above drill.
- Leg switches – Switch legs on each hop.
- **Jumps on the bench** – Do the small forward jumps the entire length of the bench. (Similar to the hops forward described above but done on the bench.)
- **On and off** – Start on the floor in glide recovery, with your recovery leg closest to the bench. Drive your recovery leg up and jump up onto the bench landing in a glide/recovery position. Jump back down on the same side, again leading with the recovery leg and landing glide/recovery again.
- **On and off alternating sides** – Same as above but do a leg switch on the bench and jump off the opposite side.
- **Over the bench** – Jumps over the bench, starting in glide recovery and landing in glide/recovery.

### Leg Swings

Leg kicks are great for dynamic flexibility, balance and co-ordination.

At first you may need to hold on to a wall, chair or railing until you can do them smoothly and in balance.

A few key technical points to watch for: Keep your entire body straight, do not allow your body to bend in any direction at the waist. Keep your head and chest up to ensure full elongation of the hip muscles. Keep your knees as straight as possible on the leg swings. When you have the rhythm of the swing add a small hop in between each swing, i.e.: hop as your leg swings up past your support leg and hop again as it swings back past your support leg. Next you can incorporate the leg swing into jogging – jog 3-4 steps and swing, jog 3-4 steps and swing again.

- **Forward and back** – Swing your leg up as high as possible and then back as far as possible.
- **Forward/side** – Swing your leg forward. Let it fall back beside your other leg and immediately swing it out to the side without letting your foot touch the ground.
- **Arounds** – Swing your leg forward and then circle it to the side and then back, making a complete circle with your leg.
- **Front/back/front** – This one is a bit complicated but great for balance and co-ordination. Swing your leg forward while hopping upwards. During the hop rotate yourself 180 degrees. Immediately on landing hop again while rotating 180 degrees again.

### Ladder Drills

#### Other balance/agility/co-ordination drills

- Skipping – use your arms back and forth.
- Simple carioca (forward cross, behind cross).
- High knee carioca (bringing your crossing knee up high in front of your chest).
- Power carioca (pushing as hard and long as you can off the cross under foot).

- Tapioca (same as carioca but moving your feet as quickly as you possibly can, taking just tiny steps).
- Hackey sack games or similar games with soccer ball.
- Best to start this one on a 2x4" piece of wood, then progress to the bench. In skating position, stand on the 2x4 so that the back part of the ball of your foot is on the wood and your heel is off. Holding your skating position raise your heel (as you would in a toe raise), hold it for a 3 count, and slowly come back down to level. When you have enough strength, allow your heel to go below level before raising back up again.
- Try using a Bosu ball for some of the above drills.
- Use a wobble board for downs and ups.