PARK & HALFPIPE MODULE

Competition Introduction

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INTRODUCTION

Welcome to the Park and Halfpipe Technical course of the Freestyle Canada National Coaching Certification Program.

Upon completion of the Park and Halfpipe Module, you should be able to:

- Coach the fundamental skills of advanced spins in the terrain park
- Coach the fundamental skills of technical rails and boxes
- Coach the fundamental skills of advanced Halfpipe skiing
- Detect and correct technique with confidence

Good luck with the course, and with your upcoming coaching season!

CHAPTER 1
AIR

Skills and Components of Jumping in a Terrain Park Environment

OBJECTIVES

This chapter presents the technical information you need to know about:

1. Jump Safety
2. Jump Basics
3. Spinning: Traditional Freestyle vs. Park and Pipe
4. Different types and direction of spin
5. Spin Technique
6. Progressing into harder spins
7. Forward-to-Switch vs. Switch-to-Forward Progression
8. Determining if an athlete is ready to try a harder spin
9. Carving Take-off Spins
10. Landing Problems/Solutions

1. Jump Safety

As with all forms of skiing, jumping involves risk. These risks can be minimized if certain safety precautions are followed:

- Helmets, mouth guards, and crash pads are strongly recommended for all participants.
- Always inspect all jumps and features before hitting them.
- Use a spotter if possible or otherwise ensure that the landing is clear.
- Progress at a reasonable pace, within your skill level.

2. Jump Basics

Before instructing anyone on jump techniques, first ensure that they are able to ski in a balanced position while applying forward pressure to the tongue of the ski boot. Once they have demonstrated this ability, check to see if they can maintain this pressure and position during a straight jump. Balanced position and forward pressure should be the number one priority, regardless of the trick being performed. Once an athlete has demonstrated an ability to execute straight airs with balanced take-offs and landings, as well as an ability to do grabs or other basic tricks, they are ready to try spins.

3. Spinning: Traditional Freestyle vs. Park and Pipe

Rotating on a vertical axis, or "spinning" is involved in all forms of Freestyle skiing, However, there is a big difference in the "Park and Pipe" athlete's needs when it comes to learning spins. Whereas the traditional Freestyle athletes learn all of their spins in the same direction, "Park and Pipe" involves spinning both directions, both forward and backwards, with a variety of different take-offs. Learning to rotate both right and left in the early stages of development, will greatly benefit the park and pipe skier in the long run. The term 'unnatural' was relevant in the early days of park and pipe skiing, as it referred to athletes' learning a spin in the opposite direction of the way they are accustomed to spinning. These days, it is no longer as relevant, as young skiers generally will wish to spin both directions as they learn.

4. Different types of Spin

The type of spin is determined by the take-off. In terms of upright rotations on jumps, there are six different take-offs that a "Park and Pipe" athlete can execute for spins:

- Forward left spin
- Forward right spin
- Switch left spin
- Switch right spin
- Switch "blindside" left spin
- Switch "blindside" right spin

Switch blindside refers to an athlete spinning in the opposite direction of the way they are looking up in the in-run of the jump. For example, an athlete who is looking over his left shoulder on the face of the jump, but spins right on take-off. Athletes have proven that torque can be generated without having to blindside take-off so it is not a necessary maneuver. Athletes that perform blindside take offs generally have done so out of habit or comfort and should not be discouraged. To learn this skill is takes patience and a great deal of skill as your take-off point disappears as your head swivels to the other shoulder emphasizing the timing of the take-off sequence. This take off is also relevant in halfpipe when there is no time to change shoulders in between hits.

5. Spin Technique

Lead with the head and shoulders

It is very important to keep the upper body "leading" the spin. The head and shoulders should always be ahead of the hips in the direction of rotation. While most athletes can commit to keeping their head turned, it is very common for a skier to try and twist the skis around in the direction of rotation, which can cause the hips to get ahead of the shoulders. Once the skier's hips get ahead of their shoulders in a spin, it becomes very difficult to achieve any additional rotation.

This athlete is effectively “blocked” by their shoulders. Athletes should be encouraged to focus on their arms and shoulders, while trusting that their feet and skis will follow. The exception to this is on the final 180 into a switch landing, for which the upper body can stop rotating in order to maintain a better view of the landing. This is discussed in more detail below. One of the best drills for learning this technique is to focus on leading the body through a switch 180. Once an athlete learns how to lead the upper body through a switch 180, they will find it much easier to apply the same technique to the finish of a 360.

6. Progressing into Harder Spins

As athletes work on progressing through more degrees of rotation, they can do so in increments of 180 degrees. Obviously, a fundamental skill in this progression is the ability to land switch.

7. Forward-to-Switch vs. Switch-to-Forward Progression

Taking a forward landing around an additional 180 to land switch, is generally an easier step than taking a switch landing around an additional 180 to land forward. This is because a switch-to-forward progression involves taking your eyes off the landing or “going blind”, whereas a forward-to-switch progression can be accomplished by simply twisting the hips and feet while maintaining the “spot” on the landing. For example, going from a 360 to a 540 can be done by simply executing a 360 as normal and twisting the skis around to switch for the landing. It should be mentioned that while the method of spotting the landing and twisting the lower body around the final 180 is the preferred technique for spins that land switch, an athlete can ease the switch-to-forward progression by first performing a few spins with the entire body rotating around for the switch landing. From here, the progression requires less additional upper body rotation for the additional 180 than it would require compared to a standard switch landing.

8. Determining if an Athlete is Ready to try a Harder Spin

A good guideline for determining whether or not an athlete is ready to try more advanced spins is their ability to perform a good, solid grab in their current spin. If an athlete can perform 540s but is unable to do them with a good grab, they should get more comfortable with that trick before moving into 720s. The ability to grab a trick shows that the athlete not only can get the rotation around, but is comfortable doing so.

9. Carving Take-off Spins

A common (and effective) practice is to carve a turn up the face of the jump and take-off on edge. An athlete can spin in the same direction as the carved turn (most common), or can spin in the direction opposite to the turn (sometimes referred to as “alley-oop carve”).

Important considerations for this method include:

- The athlete must be able to demonstrate balanced, carved turns with no sliding on groomed terrain. Inability to maintain balance and edge hold when carving up the face of a jump could lead to serious problems in the air.
- The line the athlete takes into the jump needs to be altered so that they approach the transition of the jump from the side instead of straight on. This is to ensure the turn does not send them off the jump at too much of a sideways angle. The line used generally involves an “S” turn.
- The athlete needs the ability to judge the correct speed while on the move. This technique can lead to inconsistent speeds at the lip of the jump depending on the severity of the “S” turn. An athlete should have more speed on the in run for a carved spin than they would need for going straight off the jump.
- Carve turns when done correctly can assist with off-axis or “corked” spins due to the nature of carving into the natural inclination of the jump’s takeoff. Ensure athletes are ready, aware of this, and can control their rotation to adapt to this scenario if it occurs.

10. Landing Problems/Solutions

Forward Landings

Once an athlete has learned to lead spins with the upper body, they must learn how to stop the upper body rotation at the appropriate time. It is very common for an athlete landing forward to over-rotate the upper body in the direction of the spin. This generally causes the athlete to land leaning back as well. The key to stopping this rotation is in the arms, particularly the leading arm. By emphasizing a reach down the hill with the lead arm, an athlete can effectively stop the rotation of the shoulders and upper body, creating a block while also helping to maintain a forward balanced position.

Switch Landings

The key to a good switch landing is maintaining the vision downhill, and ensuring that the hips and feet lead the rotation through the final 90 degrees. One never wants to be facing squarely back up the hill as they come in to land (this is the difference between landing “backwards” vs landing “switch”). The ideal switch landing will have the athlete in a solid switch stance skiing position as they contact the snow — shoulders and head turned towards the direction of travel.

It is extremely common for athletes to lock out or straighten their legs when landing switch. This causes exaggerated breaking at the waist, which in turn causes the hands to touch down. Athletes must be encouraged to focus on soft landings and using their legs to absorb the impact by bending the knees on landing. Strengthening their core (abdominal muscles) will help cure a forward break which is common on switch landings. Athletes should learn to flex their core when landing to ensure effective style and technique.

CHAPTER 2
RAILS

Skills and Components of Rails and Boxes in a Terrain Park Environment

OBJECTIVES

This chapter presents the technical information you need to know about:

1. Rail Safety
2. Rail Basics
3. Approach and entry position and technique
4. Body Position, Arms, and Center of Gravity
5. Vision and Rail Exits
6. Scissor Technique
7. Switch On
8. Frontside 270 off
9. Backside 270 off
10. Handrail entry
11. Lip slide entry
12. Kinks (Vertical)
13. Curves (Vertical)
14. Curves (Lateral)
15. S-Curves

1. Rail Safety

Hitting man-made features such as rails and boxes involves significant risks. These risks can be minimized if certain safety precautions are followed.

- All rails and boxes should be inspected beforehand.
- Ensure that the apparatus is well anchored in the snow.
- Ensure that there is skirting in place to prevent skis from becoming entangled in the upright support posts.
- Ensure that there are no cracks or irregularities on the sliding surface.
- Helmets, mouth guards, and crash pads are strongly recommended for all participants.
- Use a spotter or otherwise ensure that the landing is clear.
- Progress at a reasonable pace, within your skill level.
- When sliding rails, it is recommended to warm up and get comfortable on boxes and move to more advanced rails as your skills and abilities progress.

2. Rail Basics

Some basic considerations for rail technique are:

- Commitment is crucial, a positive mental attitude is as important as any technical focus.
- Generally speaking, everyone is nervous their first time trying a rail, causing them to lean back in a defensive position. This will cause them to put pressure on the back or uphill ski, resulting in an athlete falling backwards into the rail.
- Try learning moves on boxes first, and then taking the skill learned onto a rail.
- Always slide with the skis at a perfect 90-degree angle to the rail, this will ensure that the athlete doesn't split and straddle the rail.
- Never push the feet towards a rail, this is the most common cause of falls. Have skiers visualize running across a parking lot and jumping onto a skateboard with equal pressure on both feet. This can also be an effective dry-land training technique.

3. Approach and Entry Position and Technique

When approaching a rail, the athlete should be in a low, balanced position with pressure on the front of the boots. The easiest approach is in a straight line with the rail lined up between the feet; however, circumstances or athlete preferences may dictate approaching from either side as well.

It is important to keep from jumping too high when getting on the rail. It is much easier to balance when you are in a wide, low stance, so try lifting the feet up to level of the rail while keeping the upper body and arms pressed down. The "thumbs down" take off is an important teaching tool to ensure a low entry.

4. Body position, Arms, Vision, and Center of Gravity

When sliding a rail, athletes should try to adopt a low stance, this will not only make balancing easier, but will also put them in a position to push away from the rail if they start to come off early. Focusing on the arms can help to lower the center of gravity as well; instruct athletes to reach down towards their feet when sliding.

5. Vision and Rail Exits

Vision and upper body are key factors when sliding rails. Vision should always be focused on the end of the rail with their upper body leading the direction that they wish to exit the rail.

5a – Forward exit
To come off the rail in a forward position, the athlete must ensure that their shoulders are facing down the hill as they get to the end of the rail. From this position, it is a simple matter to turn the feet 90 degrees to forward as they leave the rail.

5b – Switch exit
To come off the rail switch, the athlete can line up their shoulders with their hips as they slide the rail, this will make is easy to turn the feet 90 degrees to switch as they leave the rail.

6. Scissor Technique

The first progression to performing tricks exiting or entering a rail is a bio mechanical move with your feet to lock your skis on the rail. The explanation to the “scissor” technique is pressure is created on both sides of the rail producing a much stronger platform to generate rotation, stop rotation and produce power. This is now the foundation to enter into 270 on/off the rail and switchups.

This can only be performed after the athlete has successfully landed on a rail with both feet perfectly over top of the rail. Once the feet are evenly over the rail the “scissor” technique can be taught by simply tilting one foot down while the opposing foot is tilting up. The rail under the feet becomes a central pivot point and the skis have locked around or locked onto the edge of it. Progression can be taught by sliding a rail and tilting one ski on the outside of the rail to generate rotation off the rail.

7. Switch on

Switch on is best learned on low level boxes. The most common problem that you will encounter when teaching athletes this skill, is the tendency to turn the skis early. Have the athlete focus on waiting until their boots are at the lip of the jump, then lifting the feet into the air, then turning the feet to place them on the rail. There is a tendency for an athlete to look at their feet and close their body affecting their open stance and vision. Encourage athletes to keep the same open body and vision the same as they would on a normal entry and execution of a rail.

8. Frontside 270 off

Spinning off of rails is usually first learned by spinning in the direction that you would turn to come off the rail to land forward. Once an athlete is comfortable coming off rails forward, it is a matter of turning the upper body a little bit more in the direction that they are rotating, and using hip twist to get the feet around to switch, while maintaining their vision down the hill. This rotation does not involve taking your eyes off the landing.

For a right foot forward rail slide, a frontside spin off would have the skier spin 90 degrees on the rail or box to the left. Then spin 270 degrees off the rail to the right and land switch. Use the scissor technique to lock the skis on the rail or on to the edge of the box. Using the rotation technique (lead with upper body) initiate the spin out. Spinning frontside off a box instead of a rail is a great progression. It will require: for a right foot forward slide, landing 90 degrees on the left edge of the box, tilting the front ski down over the left side of the box to “lock” in the ski. Push away from box to generate the power for the spin. Encourage skiers to try both left foot and right foot forward rail slides.

9. Backside 270 Off

On this trick, the athlete will lose sight of their landing. Spinning backside off of a rail is when you spin off in a manner so that your back is to the landing at the start of the spin. In some cases, athletes may prefer this method because the bit of rotation involved with jumping onto the rail (90 degrees) can be continued. It will require more upper body rotation due to the fact that you will be landing forward, and therefore want to have your body facing down the hill at the moment of landing.

For a right foot forward rail slide, the skier will spin on the box or rail 90 degrees spinning left then spin off the rail left 270 degrees and land forward. The box progression would have a right foot forward rail slide land on the right edge of the box 90 degrees, tilt the front ski back to “lock on” and push off the right side of the box on the tilted ski generating power.

10. Handrail Entry

Many terrain parks are now simulating “urban” rail set-ups by placing a rail in a manner that requires athletes to approach the rail from either side. These are commonly referred to as “handrails”. Approaching rails from the side can first be practiced on easier rails and boxes. The first method taught should be getting on with the foot that is closest to the rail becoming the uphill foot when on the rail. For example, a skier approaches the rail from the right, and jumps on to slide right foot forward. This entry requires the tips of the skis to clear the rail when jumping on, and will also require the skis to twist slightly less than 90 degrees on entry.

Depending on the severity of angle in the approach, the skier's momentum may try to carry them over the other side of the rail; in this case they will need to land on the rail with the skis tipped back slightly in order to redirect their direction of travel down the rail.

11. Lipslide Entry

"Lipslide" is when the skiers' entry results in the foot that is closest to the rail becoming the downhill foot when on the rail. This entry requires the tails of the skis to clear the rail when jumping on, and will also require the skis to twist slightly more than 90 degrees on entry. If a significant angle of approach is used, athletes will need to land on the rail with the skis tipped forward in order to redirect their direction of travel. Care must be taken to ensure that the tails of the skis are lifted high enough to clear the rail when getting on. A good visual cue is to have athletes think of pulling their tails up and over the rail.

12. Kinks (Vertical)

There are two types of Vertical kinks that skiers will encounter:

- Rising Kinks, when the next section of rail rises in relation to the first.
- Falling Kinks, when the next section of rail drops away in relation to the first
- Falling kinks are usually the easier of the two.

A down-to-flat rail would have a rising kink, whereas a flat-to down rail would have a falling kink. It is important to start out with kinks of lesser degrees, and gradually progress up to sharper ones.

Rising Kinks will increase the pressure of the skier on the rail, so athletes may need to absorb slightly. The weight needs to be adsorbed as the skier goes through the kink, so as to avoid the feet catching.

Falling Kinks require the athlete to be in a very low position as they reach the kink. This is so that they will have some available range of movement to extend the feet down as the rail drops away. The weight needs to shift forward as the skier goes through the kink, so as to avoid slipping out.

13. Curves (Vertical)

The most common example of a vertical curve is a "rainbow". The same principles as vertical kinks apply; however, the movements and adjustments need to occur throughout the length of the curve instead of happening in one place. Depending on the severity of the curve, a complete range of flexion and extension may occur.

14. Curves (Lateral)

Lateral curves can be best learned on C-boxes, where the surface of the box is angled towards the inside of the curve. This will put the athlete into a certain amount of lean, which is required to counter the athlete's momentum, and prevent them from going off to the outside of the curve. Speed is a very important factor here. Too much will send the athlete to the outside, too little and they will come off to the inside of the curve.

Once the athlete is comfortable on a C-box, they can try a C-rail. The important thing is to get the right amount of lean for the curve and the correct speed. If an athlete is having trouble leaning on the rail, have them focus on landing with a different area of the foot on the rail. Landing more towards your heels will automatically tip you forward, whereas landing more on the toes will tip you back. A helpful hint is to land with your skis angled where they will be 90 degrees in the center of the curve. For example, a skier sliding a left-handed curve with their right foot forward, will want to turn more than 90 degrees to the left when they get on the rail.

15. S-Curves

Before an athlete attempts an S-curve, they should be proficient at both left and right C's. S-curves can make it hard to maintain the skis at 90 degrees to the rail, especially in the transition from one curve to the next. Have the athlete focus on keeping the leading shoulder lined up with the rail, and staying committed! Throughout the movement athletes should attempt to have their hips over their feet by using a fore/aft weight transfer, and focus their vision on the end of the rail (not their feet).

CHAPTER 3
HALFPIPE

Skills and Components of Advanced Halfpipe Skiing

OBJECTIVES

This chapter presents the technical information you need to know about:

1. Halfpipe Safety
2. Halfpipe Basics
3. Body Position
4. 180 and Basic Pipe Riding
5. Line
6. Edging
7. Drop-in
8. Diving In
9. 3 Types of pump
10. Pump Drills
11. Types of rotation
12. 360
13. Alley-oop 360
14. 540

1. Halfpipe Safety

Skiing man-made features such as Halfpipes involves significant risks. These risks can be minimized if certain safety precautions are followed:

- The pipe should be inspected beforehand to ensure proper transition and vert.
- Helmets, mouth guards, and crash pads are strongly recommended for all participants.
- Keep an eye out for others, many riders take unpredictable lines in the pipe.
- When hiking the pipe, keep well away from the lip, and watch for skiers exiting early.
- Progress at a reasonable pace, within your skill level.

2. Halfpipe Basics

Before instructing anyone in the Halfpipe, first ensure that they are able to ski in a balanced position while applying forward pressure to the front of the boot. Balanced position and forward pressure should be the number one priority. Instruct your athletes to practice responsible etiquette when at the pipe. Alert others when you drop in, try to exit the pipe quickly after a fall, and never try to climb up the wall to get back out to the deck.

3. Body Position

When approaching a hit in the Halfpipe, the ideal body position is very low and forward. Because of the increased G-Force as athletes move through the transition, anyone adopting a tall position will most likely "buckle" through the transition, causing loss of speed, energy, and balance. Instead athletes should think of extending as they go from the flat bottom throughout the transition.

4. 180 and Basic Pipe Riding

In order to ride the pipe effectively each hit must entail a proper 180 either down the pipe or alley-oop. The upper body must lead the lower body to complete with control and to keep the proper line. As the skier approaches the lip from the flat of the pipe a separation must occur where the upper body begins to rotate. When takeoff occurs, the lower body follows the upper body and completes the 180 maneuver.

DRILLS

- Get athletes to point shoulders towards the bottom of the pipe while travelling up the wall to create the separation.
- Proper vision — vision is at the lip of pipe traveling up the wall, after takeoff vision is on landing, then quickly focused at the next hit.
- It is essential to cat twist this 180, contact twist will cause an over rotation and poor landing, likely fully extended.
- Landing the 180 must occur in the vertical portion of the pipe. Landing too low will lose speed for the next hit. For advanced skiers landing should occur in a flexed position so pumping the vertical wall down can occur.

5. Line

The ideal line through a Halfpipe is the one that maximizes the athlete's speed and height without having to alter direction between hits.

It can be useful to use a less than ideal line for the purpose of learning certain tricks. For example, alley-oop spins will be easier learned if the skier takes more of a straight up and down line. Spins usually require more of an indirect or down the pipe line to lessen the amount of rotation required.

Many skiers will “s-turn” between hits, trying to gain speed. The energy lost in transferring back and forth between edges, as well as cornering, will detract from any speed gained in the downhill portion of the “s-turn”, rendering this a very ineffective technique, which should be discouraged.

If a skier wants to gain speed they can do so by performing one hit with an exaggerated “down the pipe” angle. This will give them extra time on the steep part of the wall, pointing downhill, and only requires modulation of the edge pressure on the downhill ski to re-adjust to the correct line.

6. Edging

Coaches should stress the importance of edging and carving skills in the Halfpipe. In order to maintain speed, an athlete needs to ride a clean edge the entire way between hits. If an athlete has trouble holding an edge in the pipe, they will most likely benefit from some basic edging and carving drills on the flats. Competitive pipe skiers will have skis dedicated purely to pipe. Razor sharp edges and proper waxing techniques are essential to a competitive pipe run.

7. Drop-in

The drop-in is a move that many skiers take for granted, and with some proper instruction, some dramatic results can be seen quickly.

The goal of the drop-in should be to feel pressure on the wall at the highest point, when entering the “vert”. Most skiers have trouble achieving this pressure because they enter the pipe at too sharp of an angle, which will cause them to free-fall down into the lower portion of the transition.

Drop-in Drills:

- Pole Drill: Place a bamboo pole or other marker parallel to the lip of the pipe with only enough room for the athlete’s skis to fit inside. Have the skier drop-in from inside this area, which does not allow any room for a turn into the pipe.

- Advanced Pole Drill: Set-Up the bamboo pole as described above, and block the lower portion of the area with another pole. The athlete now has to “ollie” out of the area with the skis parallel to the lip, then pull the feet in to get them on the wall. This will help them achieve pressure at the top of the wall.

- Step-Up Drop-in: Ask the skier to try and “step-up” from the slight rise at the beginning of most pipes and land on the vert wall above the point of take-off. This is the most common and best option for skilled pipe riders.

8. Diving In

Many skiers have trouble maintaining forward pressure on the steep parts of the Halfpipe wall. Most times this is caused by reluctance to commit the body to a horizontal position. The instinctive desire to keep the feet underneath the body needs to be overcome. An effective way to do this is to focus on "diving in" or leading the way with the upper body. At first it will be a scary move for an athlete to "dive" down into the pipe, but with practice they will find that the forward pressure and stability gained through this approach is well worth it.

9. Three Aspects of Pumping

Utilizing the transition of the pipe to gain speed is referred to as "pumping". There are three basic movements that can achieve this effect;

1) ***Body Extension*** **—** This is the most productive aspect of a "pump". An athlete in a low position extends powerfully as they enter the transition, helping to redirect their momentum in the new, desired direction.

2) ***Arm swing*** **—** Another aspect of pumping is to swing the arms forward/up when in the transition. The weight of the arms will add momentum to the new direction as well. This move needs to be learned in a smooth manner that does not adversely affect the balance.

3) ***Fore-Aft Weight Shift*** **—** By shifting the weight from the front to the back of the foot, the athlete spends more time with the weight on steeper terrain, being accelerated by gravity (for a pump on the way down-on the way up they spend less time being decelerated). If mistimed, this move can easily cause athletes to get backseat, and should be practiced carefully at first.

The most effective pump is one that utilizes all three of the above aspects in combination.

10. Pump Drills

Separate the skills drill:
Have the athletes ski the pipe focusing on the individual aspects of pumping and performing them in isolation. One run with only arm swing, one run with only Body extension, one run with only Fore-Aft weight shift. This will give them a better feeling for everything involved with pumping, and make it easier for them to combine the skills into a more effective overall pump.

High mark drill:
Mark a point on the lip from which to drop-in. From a standstill, drop-in, perform one hit on the opposite wall, and then pull out of the pipe on the same side that you dropped in from. The object of this drill is to see who can pull out of the pipe the closest to the drop-in point. Effective pumping will enable you to get back out without using a lot of downhill travel for speed.

11. Air to Fakie

Have athletes drop in close to bottom of the pipe. No rotation is generated entering take off and vision is still focused on takeoff point. After takeoff vision is directed at landing area. Skier should be in proper switch skiing position with small downhill lead change and shoulders open towards bottom of pipe. After landing vision MUST immediately focus on direction of travel (the next hit). After landing, if vision is still focused on takeoff point (common) the transition from vertical to flat will buckle the skier at the waist and lose control making the next hit near impossible. Travelling switch through a halfpipe with vision not focused on direction of travel causes even the best skiers a great amount of difficulty.

12. Types of Rotation

When teaching spins in the Halfpipe, it is important to understand that spinning on the left or right wall will feel completely different to the athlete. They will be coming up the wall with the weight on a different leg, and the momentum forces will be acting on them in a different manner laterally. For teaching purposes, left and right wall spins can be considered to be different types of rotation.

It is worth noting that maintaining edge pressure and line when going switch is generally easier when looking over the downhill shoulder. However, many athletes have learned how to perform amazing switch tricks in Halfpipes utilizing an approach looking over the uphill shoulder, in fact this is the most common method of approaching a switch down the pipe spin. It is definitely worthwhile to have athletes experiment with all 6 rotation take-offs on both left and right walls. Considering the difference in doing tricks on the left and right walls, this can give an athlete up to 12 spin take-offs, all of which can feel quite different.

13. 360 in the Halfpipe

For learning 360 in the Halfpipe, it is important that the athlete can consistently perform 360s on jumps, is able to maintain a balanced position skiing the Halfpipe, and is comfortable landing switch in the transition (i.e.: air to switch). In a large Halfpipe, this skill can be learned at or below the lip first.

Although taking more of a down the pipe line will require less rotation, it is recommended to first try this skill in a very “cross-hill” manner, as the speed will be less intense upon landing switch in the transition. The skier rides up the wall as normal, and sets rotation with the upper body at the moment of takeoff. There will be a transfer of weight from the downhill ski to the uphill one as they take-off.

A common problem is getting too upright in the air and landing with the feet too far below the body. Have the skier focus on keeping their feet up at the level of their torso. A wide stance is preferred for landing switch in the pipe for added stability.

14. Alley-oop 360 in the Halfpipe

This trick will feel substantially different than a 360 down the pipe, in fact many skiers may find the Alley-oop 360 less intimidating to learn. Spinning back up the hill will keep the speed under control, and doesn't require as much weight transfer on the take-off (you can set the spin off of the same edge that you ride up the wall). This trick will definitely be easier to learn with a cross pipe direction of travel, keeping the speed down, and requiring less rotation. Once the skill is learned, have the athlete try to gradually increase the amount of down pipe angle, and subsequently increase rotation slightly to increase and maintain speed control.

15. 540 in the Halfpipe

To perform a 540 in the Halfpipe, the athlete simply needs to set more rotation, and commit to "going blind", or losing sight of the landing momentarily. This move will land forward on the wall, so for learning purposes, taking a little more of a down the pipe line can decrease the amount of spin required to get around. Realize that doing this will contribute to extra speed on the landing. 540s are easier to perform with a more indirect or "down the pipe" take-off.

Common problems and solutions encountered with 540s are:

- Getting too upright: have the skier focus on "diving" back into the pipe with the upper body as they complete the spin.
- Setting too much rotation with the hips: have the skier focus on setting with only the shoulders.
- Leading the spin with the hips and feet: have the skier focus on the shoulders and arms leading the spin.

CHAPTER 4
THE ROLE OF THE COACH

As a coach, you will find yourself playing a number of different roles in your relationship with athletes and their families. In addition to being a teacher and trainer, coaches are often seen as role models, mentors, big brothers or sisters, mediators or simply, someone who children and parents can rely onto listen and care.

A coach's most important role, however, is that of safety advocate. Ski hills and terrain parks can be dangerous environments and parents must be able to trust that a coach will safely supervise their children and prevent them from being harmed or injured. Providing a safe, yet fun environment may sometimes be challenging, but well worth the extra precaution. Always remember that you are "a coach first and a friend second". Looking after an athlete's best interests is a coach's primary task.

Coaches are also expected to be great motivators and mentors. Developing skills and experience in creating a positive learning environment and keeping your athletes involved in the learning process are key components of becoming a good teacher. Practicing what you preach and consistently providing positive examples of behavior will have an enormous influence on how athletes perceive and develop respect for you.

When your athletes return home safe and free of injury and raving about all the great stuff they learned, you will know that you have done your job.

Coaching is more than teaching skills. Coaching requires the coach to develop strong interpersonal skills that will foster the personal and technical development of your athletes. The coach may be a teacher, a mentor, a friend, a leader, or some or all of these things. Coaches who are effective leaders and communicators are effective coaches.

This section will review some skills that will help you become a better technical coach as well as a better leader and communicator.

Coaching Code of Ethics

As a coach, the way you perform your duties is as important as how much technical knowledge you possess. Coaches must perform their duties in an ethical manner. This means, coaches must be fair, honest, and principled, as opposed to unfair, dishonest and unprincipled. The way you carry out your duties will affect the athletes' moral and mental development, not to mention their learning of technical skills.

The Coaching Association of Canada and the Canadian Association of National Coaches have developed a Code of Ethics for Canadian coaches. This Code provides a framework within which you may structure the way you perform your duties as a mogul coach:

Integrity:
The coach must act with integrity in performing all duties owed to the athletes, the sport, other members of the coaching profession, and the public.

Competence:
The coach must strive to be well prepared and current in order that all duties in the respective discipline are fulfilled with competence.

Athlete's Interest:
The coach must act in the best interest of the athlete's development as a whole person.

Respect for the Rules:
The coach must accept both the letter and the spirit of the rule that define and govern sport.

Respect for Officials:
The coach must accept the role of officials in providing judgment to ensure that competitions are conducted fairly and according to the established rules.

Responsibility to Other Coaches:
The coach's conduct toward other coaches must be characterized by courtesy, good faith, and respect.

Personal Conduct:
The coach must maintain the highest standards of personal conduct and support the principles of fair play.

There is one area where no compromises can be made. Drug use in sport for the purpose of enhancing performance is cheating! A coach who supports and condones this behaviour should not be coaching.

Leadership

Coaches are leaders. Their primary role is to help the athlete achieve his/her potential as a competitor.

Leadership requires the coach to:

- Respect the unique and individual athlete's differences and needs.
- Develop and articulate clearly stated goals and plans to achieve those goals.
- Focus on the needs of the athletes and provide them appropriate challenges and feedback
- Provide open, honest and effective communication with respect to his/her goals, plans, feedback, etc.
- Develop a sense of trust, mutual respect and shared purpose for the group of individual skiers.

Effective leaders lead by example and focus on all aspects of the program and athletes. They provide new challenges for themselves and their athletes; they inspire people to strive towards a well-defined goal; they provide people with the skills and empower them to achieve their goals; they encourage and recognize achievements when the goals are attained.

Communication

a) Effective Communication

Effective leaders and coaches must also possess strong communication skills. Well-developed communication skills will enable the coach to be a better teacher, leader, and person.

Effective communicators strive to achieve a win-win situation for all participants. They clearly state their opinions and statements; they are honest; they respect what others have to say. Additionally, they respect and value their own opinions and statements.

Effective communicators:

- Think before they speak — statements that are thought out in advance are easier to understand.

- Determine the purpose of their communication — to inform, to correct, to initiate action, to congratulate, to change behaviour, etc.

- Choose a setting that is appropriate for the topics being discussed. For example, the coach may choose a quiet room to discuss an athlete's annual report instead of performing this in a large room with other people.

- Individualize the message being communicate, respecting the other person's background needs and expectations.
- Use language that is simple and specific; avoid jargon and big technical words.
- Project a message with their body that is consistent with their message being spoken (i.e. body language compliments spoken language).
- Encourage other people to provide feedback.
- Are honest and sincere. Don't try to pull the wool over someone's eyes.
- Take into consideration the future when speaking in the present.

Effective communicators feel as if they have accomplished something at the end of the discussion by conducting the discussion with mutual respect, controlling only those aspects of the conversion within their control (e.g. controlling your own emotions, not trying to control the emotions of others), accepting — but not necessarily agreeing with — what the other person is saying, and helping to find common solutions.

b) Active Listening Skills

One of the major functions of the coach is, to provide the athletes with knowledge that they will use effectively in their own analysis of a situation. The desired outcome is that the athlete will eventually become self-directed.

A major skill that will assist the coach become a more effective communicator and teacher is active listening. Some coaches tend to do a lot of talking and very little listening. In part, this is an outcome of the perception that the coach is there just to "teach" the athlete how to perform a skill or set of skills. An effective coach provides feedback; i.e. talks to his/her athlete, but the effective coach also listens to his/her athlete. Active listening requires the speaker to take responsibility for their own actions with the purpose of understanding better what is being communicated to them.

Strategies to become an active listener include:

- Re-phrasing the statement — say the statement in another way that will communicate the same message.
- Let the person speaking finish his/her statement — don't interrupt!
- Ask questions to clarify any unclear statements.

- Restate what was said to you verbatim — this will indicate that you clearly understood what was said.

- Don't pass judgments on statements being presented or the person communicating.

- Use body language (e.g. hand gestures, eye contact, facial expressions, stance, arm movements) that complement the verbal message being presented.

Active listening is not a skill we are born with. This skill requires lots of practice. It requires the listener to concentrate on what is being said and interacting with the speaker. The end result should be a constructive dialogue between the two of you. By employing active listening skills, you will better understand what is being communicated to you and build trustworthy relationships.

Coaches who employ active listening will better understand what their athletes are saying to them. This will, in turn, allow the coaches to better meet the needs of these athletes. These coaches will also build relationships with their athletes that are based on mutual respect and trust.

c) Active Listening Skills

Good communication also involves providing feedback in an appropriate manner. The coach should provide feedback that stimulates personal growth and improves the athlete's performance. The coach should frame his/her feedback in a positive manner. The feedback provided should not put the athlete in a position where he/she feels a need to defend himself or herself.

The following are some guidelines for giving and receiving feedback in an appropriate manner:

Giving Feedback

Understand and be sensitive to the needs of the athlete.
Be open, honest and frank without offending or putting down the athlete.
Provide bite size bits of information (1-3 items maximum, depending on the complexity of the feedback — greater complexity, less information).
Clarify that the message you wanted to give was understood — ask the athlete to repeat what was said.

Receiving Feedback

- Listen to the verbal and non-verbal messages. (i.e. body language) being communicated.
- Don't explain, defend or deny what is being said.
- Actively listen to what is being said — encourage the feedback to be given.
- Ask speaker to clarify any parts of the feedback you don't clearly understand
- Wait to respond — digest the information — think about it!

Conclusion

These communication skills are valuable for both the coach and the athlete. By learning and teaching these skills to your athletes, you will create a positive environment in which to communicate with one another.

Safety

Warm Up

An effective warm-up will prevent injuries and help athletes relax both physically and mentally. It is important to warm up both the muscles and the central nervous system with appropriate exercise.

The Activation Cycle

Coaches should always warm their athletes up gradually at the start of a training session and conduct a warm down at the end. This should be done in both the morning and the afternoon. Equally important to remember is that an athlete's abilities and energy levels will fluctuate throughout a training session. This fluctuation will vary from one individual to another, but will generally follow a predictable pattern. As athletes warm up, they become quicker, stronger and more coordinated. However, as the training day ensues, signs of fatigue will eventually begin to show. Performance errors will appear and an athlete's mood may change. Being able to recognize signs of fatigue is vital to preventing injuries. A good coach can consistently create and maintain good training rhythms for skill improvement to take place.

At appropriate times (for example, the afternoon of the last day of a training weekend) it is acceptable to train athletes in a tired state, as long as they have enough energy to avoid fatigue related injuries and that improvements are taking place. Remember to plan proper rest after the session. In general, the intensity in afternoon sessions cannot be maintained as long as in the morning sessions. Coaches should anticipate when an athlete may start to show simple performance errors to ensure that athletes leave the hill on a positive note and avoid fatigue related injuries.

With proper planning a good understanding of an individual's abilities, coaches can optimize the learning experiences of their athletes.

Growing Bodies

Children in the Learn To Train (9-12 years) and Train to Train (11-16) age groups are growing and changing constantly. While growing, children's bones are softer and more pliable than an adult's. This makes children more susceptible to breaking bones and developing growth plate injuries.

Crossing both of these development levels involves both knowledge of progressions and proper loading as well as adequate recovery from training.

Growth plates are located at the end of a growing child's bones and facilitate the lengthening and thickening of the bones. If these areas are injured, due to a traumatic or repetitive strain injury, the growth plate can stop growing, giving the child a bone that is shorter than it should be.

Avoiding traumatic and repetitive strain injuries is crucial to an athlete's growth and development. One way coaches can do this is to pay extra attention to how they select and design jumps, runs and other training sites.