

## SECTION E - TEACHING INTERMEDIATE SNOWBOARDERS

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# Exploring The Turn

**EXPLORING TURN SIZE & SHAPE**



**EXPLORING DIRECTION (SWITCH RIDING)**



**EXPLORING NEW TERRAIN**



## IN THIS CHAPTER WE WILL EXPLORE...

Different tasks and progressions that will help to guide a student's understanding and skills while exploring the shape, size and direction of the turn. We will also look at where and when to use these skills on the different terrain that students will encounter as they progress.

This begins with learning how to vary turn size and shape (see Chapter 6). This will give them the basic skills required to ride and explore different groomed terrain and understand where each turn is best suited. In addition to this, introducing switch riding will help the student to become more versatile, enabling more options as they begin to explore freestyle and freeride skills.



## EXPLORING TURN SIZE & SHAPE



### WHAT, WHY, HOW

Learning to change the size (small, medium and large) and the shape (open and closed) of the turn.

Varying turn size and shape provides options for maintaining and controlling speed, as well as line choice, as we start to explore new terrain.

#### TURN SIZE

- ▶ Making different sized turns relies on similar movements used in our medium skidded turns.
- ▶ Let's review the movements of gently rising, moving your front knee and hip towards the new turn, once the board is flat, progressively flex over the new edge, turning the front knee and hip to steer the board across the hill.
- ▶ Focus on how long it takes to make each turn, try to measure them by counting how many seconds each turn takes (typically three-four seconds).
- ▶ To make the turn smaller, simply make the same blend of movements a little quicker for a two second count. It may also help to turn the front knee and hip a little more.
- ▶ Larger turns can be achieved by slowing down the same blend of movements or increasing the time taken (typically a five-six second count).
- ▶ Use the same timing changes while focusing on the pressure under the soles of the feet, moving across from the heel, to the centre of the foot, to the ball of the foot and back again.
- ▶ Progressively change the size of your turn by starting with small turns and gradually making them bigger, increasing the timing or count as we ride (or vice versa depending on the terrain available).

#### TURN SHAPE

- ▶ Varying turn shape relies on similar movements used when altering the size of the turn. The more open the turn becomes, the faster you will travel.
- ▶ Focus on how long it takes to make a medium closed turn across the fall line and imagine that you are riding around the bottom of a clock face from three to nine o'clock then back again to close the turns.
- ▶ To make the turns more open, ride around the clock face from four until eight o'clock and back again turning the board less across the fall line. For a really open turn try turning between five and seven o'clock. You will find that you start to pick up more speed the more you open up the turns.
- ▶ Now let's see if you are able to start with open turns and progressively make them more closed.
- ▶ Now that you are able to make different size and shaped turns it's time to vary them to suit the terrain that we are riding. As you look at the slope in front of us what would be the most appropriate turn to use?



## TECHNICAL DESCRIPTION

### VERTICAL & LATERAL

Progressive extension and flexion is required through the lower body. Heel-to-toe, extend through the knee and hip to shift the COM over the board then flex through the ankles and knee to balance over the new edge. Toe-to-heel, extend through the knee and ankle to shift the COM over the board then flex through the knees and hips to balance over the new edge. Note that there will be some independence within the leading half of the body laterally to help with the initiation. The amount of vertical and lateral movement can remain similar for different size and shape turns, though the duration will need to vary.

### ROTATIONAL

Movements should be focused in the front knee, while allowing the hip through to shoulders to make a subtle movement in the same direction to aid in steering. Smaller turns will often require more rotational movement timed faster while larger turns require less rotational movement over a longer duration.

### LONGITUDINAL

Fore/aft movements should remain in a centred position to help maintain effective vertical, lateral and rotational movements.



## TERRAIN & CLASS HANDLING

Mileage with feedback on familiar green terrain is a key to creating the skills needed to progress onto new and more challenging terrain. Make students aware that larger turns will usually result in an increase in speed and use more of the slope. Smaller closed turns will be needed as we move onto steeper terrain to help control speed. Open turns will result in an increase in speed and will be useful for flatter terrain.



Students will need to be very conscious of other people on the mountain as they will potentially be traveling faster and using more width of the slope. Awareness of the pitch of the terrain and snow conditions is crucial to their success and development. The students will often be traveling for longer durations and be well spaced out so setting clear meeting points at the sides of the run will help keep the class together and safe from uphill traffic.



## SELF REFLECTION

*“Did I make my students aware of why we make different sized turns?”*

*“Do my students know how to control speed through the size and shape of their turns?”*

*“Are my students able to match the size and shape of their turns suitably to variations in terrain?”*



## EXPERIENTIAL TEACHING EXAMPLE:

When riding a bike you need to turn the handlebars faster to go around a tight corner and more progressively when it is a more gradual corner. We use our front knee and hip in a similar way to steer the board for small, medium and large turns. You can also compare open and closed turns to a series of gradual hairpin corners or open flowing corners. The hairpins you steer the bike more and for longer and the flowing open corners you steer for a shorter time and are usually able to travel faster.



## DETECT & CORRECT

With all corrections it is important to first assess the rider's stance to make sure they are in an aligned position.

Student falls inside the turn through the control or completion phases:

- ▶ Have your student stay laterally balanced over the board with the upper body at low speeds.
- ▶ Encourage edging movements using flexion in the lower body for balance.
- ▶ Ensure your students have enough momentum to help them balance.

Student experiences instability or chatter during turn completion:

- ▶ Encourage your student to use a larger and more progressive range of flexion movement to aid stability through turn completion. For example, over-flexing at the hips on the toeside will move the upper body laterally out of balance. More flexion in the ankles and knees will complement hip flexion, resulting in a more laterally balanced riding position.

Student lacks speed control:

- ▶ Review how to create a closed turn shape through effective steering using the knee, hip and shoulder.
- ▶ Discuss and review with your student if they are using an appropriate combination of turn size and shape for the terrain.
- ▶ Encourage smooth progressive steering through the lower body for the appropriate duration for the size and shape of the turn.
- ▶ Practise garlands with the focus on finishing across the hill.

## EXPLORING DIRECTION (SWITCH RIDING)



### WHAT, WHY, HOW

Learning to ride switch (opposite direction) with a flat land 360 progression.

Switch riding is essential for a lot of freestyle tricks. Switch can also help in becoming more versatile when freeriding.

- ▶ Begin traversing on the board switch, focusing on a relaxed and rotationally aligned stance.
- ▶ Try a series of back up turns in each direction. Start by traversing across the hill switch then guide the board up hill by gently turning the lead hip, knee and shoulder until you begin to slow down and the board is flat on the snow. Then turn your head and look towards the other end of the board. Gently move the hips over the new edge, turning the new lead knee and hip to steer the board across and back up the hill.
- ▶ Repeat a series of these across the hill in both directions creating W-shaped arcs in the snow.
- ▶ Turn them into slow flat land 360 spins, starting the next back up turn earlier each time, so you are continually spinning. Use small movements with the ankles and knees to gently flatten the board and guide around the spin. Try them in both directions, clockwise and counterclockwise.
- ▶ Now try linking switch skidded turns, applying steering through the new lead ankle, knee and hip. Rotating the shoulders and head progressively into the turn will also help here. Rising up and moving the hips over the board will help with balancing on the new edge.
- ▶ Looking continually in the new direction of travel is crucial.

(An alternative approach is to work through the Learn to Turn progression starting with a switch traverse, into switch garlands, C-turns and linking turns.)



### TECHNICAL DESCRIPTION

#### ROTATIONAL

Rotational movement should come from the lower body, the same as with linking turns in the forward direction, focusing on the new leading knee. The upper body and head may rotate slightly ahead of the lower body to help alignment and encourage looking continually through the turn.

#### LATERAL

This movement is minimal, but enough is needed to change edge and balance over the uphill edge. The student must focus their attention on the timing of the edge change first and foremost. Twist is used for effective initiation.

## VERTICAL

Vertical movement consists of an extension to help move the hips across the board and flexion through the control and completion phases to aid balance and manage the minimal pressure that is created. More importantly, encourage vertical to help blend the other movements.

## LONGITUDINAL

Movement here can consist of a slight pressure fore to aid turn initiation and ensure the student remains perpendicular to their board and the slope.



## TERRAIN & CLASS HANDLING

Similar terrain and class handling to garlands and linking turns should be applied; however, you may choose to use a flatter area on a green run that is away from a beginner area. Students' coordination when riding switch is likely to be less developed, so mileage with simple tasks may be needed. In addition to this, greater consideration to blind spots should be discussed as students may not rotate their head as far to the heelside as they do when riding forward. Setting appropriate focal points will help. Dizziness may also be a factor if students perform multiple flat land 360s in a row. Appropriate green terrain and snow conditions are essential to learning switch, as comfort and confidence are needed for success.



## SELF REFLECTION

*"Did learning switch increase the amount of falls my student had?"*

*"Are they feeling a sense of achievement through learning to ride switch?"*

*"Should I encourage a little more upper body rotation to help the rider align with and look in the new direction of travel?"*



## EXPERIENTIAL TEACHING EXAMPLE:

Learning to ride switch is like learning to write with your other hand, it may feel very unnatural and awkward at first. It will often be harder to make the fine movements with your finger and thumb when writing and the small movements with the ankles and knees when riding switch. With practice it will become easier and more familiar.



## DETECT & CORRECT

Switch riding will have similar issues to garlands and C-turns. The majority of inefficiencies will result from an inefficient stance or not looking in the direction of travel. Traverses are a great way to find a balanced stance so the rider has the correct starting and finishing position.

## EXPLORING NEW TERRAIN



### WHAT, WHY, HOW

Applying turn size and shape to the mountain's natural and varied terrain.

Being able to ride more of the mountain will create adaptability and give options to your students' riding and line choice.

- ▶ Before heading down steeper, more varied terrain, review how to vary the size and shape of the turn on a green run.
- ▶ To get used to the steeper terrain do a floating leaf to feel how much more you need to edge the board to slow down and control your speed. Focus on the increase in pressure under the soles of your feet and how much you need to tilt the board to control your speed.
- ▶ With the same exercise, progressively rise up when steering into the fall line and sink down when slowing or stopping. This will help when turning.
- ▶ Smaller closed turns will help with speed control. Use stronger and faster steering movements with the front knee, hip and shoulder to guide the board through the turn.
- ▶ Open turns on flat terrain will help to maintain our speed. Remain balanced over the board with relaxed ankles and knees. Larger turns can be used to increase our speed as well.
- ▶ Decide which turn to use when looking at the terrain ahead. What turn size and shape should we use to match up to the terrain, trying to maintain a similar speed? How fast should we go when it gets busier with other snowboarders and skiers around us?





## TECHNICAL DESCRIPTION

### VERTICAL & LATERAL

An increase in flexing movement through ankles, knees and hips in the control and completion of the turn will be required to deal with the increase in pressure on steeper terrain. A larger range of vertical movement will enable a balanced progressive (angulated) lateral movement to help tilt and edge the board more appropriate to the increased pitch of the slope. A shorter duration of vertical and lateral movements at the start of the turn can help to create an early/faster initiation in steeper and varied terrain. Maintaining relaxed ankles will make it easier for the rider to make fine tuning adjustments.

### ROTATIONAL

Stronger and larger ranges of rotational movement through the front hip and knee may be required to steer the board effectively relative to the amount of edging, the terrain being ridden and the speed the rider is travelling. All rotational movements should be timed smoothly and progressively.

### LONGITUDINAL

Fore/aft movements should remain in a centred position to help maintain effective vertical, lateral and rotational movements.





## TERRAIN & CLASS HANDLING

Mileage with feedback is key to progressing students at this stage. Students can begin to develop inefficiencies if they are over challenged on new terrain and some students may become anxious and afraid. Remember the “old task on new terrain” theory. Be prepared to alter your lesson plan into correctional focuses, as new terrain will often highlight issues in the students’ movement patterns that were not obvious on easier terrain.

There may be more hazards in the newly explored terrain, as well as higher traffic areas with people traveling at faster speeds. Safe stopping points at the sides of runs and very visible from above should be used. Let students know to slow down well before they are about to stop with the rest of the group.



## SELF REFLECTION

*“Were my students ready to attempt more challenging terrain?”*

*“Are they able to control their speed on varied and steeper blue runs?”*



## ENVIRONMENTAL TEACHING EXAMPLE:

Encourage decision making from the students, matching up the appropriate size turn to changing pitches in the slope while trying to maintain a similar speed. Larger or open turns on flatter sections and smaller on steeper terrain. Using banks to help change the size of the turn or reduce speed helps the student to understand how they can use terrain to their advantage.



## DETECT & CORRECT

Rider picks up too much speed in the steeper sections:

- ▶ Review closed turns and how to steer the board across the hill.
- ▶ Try skidded traverses to get the appropriate lateral and longitudinal balance for the end of the turn. This can also be used to find the appropriate amount of edging for the completion of the turn.
- ▶ Garlands can help with effective initiation and steering movements.
- ▶ Jigsaw turns, where the board travels back up hill, will help to control the speed through over finishing or closing the turn.
- ▶ Setting focal points at the side of the run will help encourage the student to steer the board across the hill.

Rider slows down too much or catches edge on flat terrain:

- ▶ Review open turns on easy green terrain and set focal points down the hill.
- ▶ Talk about how riding a completely flat board in some snow conditions can lead to edge catches.
- ▶ Introduce a small edge roll task down the fall line focused in the ankles while the upper body remains relaxed and balanced.

## SECTION E - TEACHING INTERMEDIATE SNOWBOARDERS

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# Exploring Freeriding

**INTRO TO OFF-PISTE****PASSIVE ABSORPTION****ACTIVE ABSORPTION**

## IN THIS CHAPTER WE WILL EXPLORE...

Progressions and tasks used to help deal with the unpredictable terrain encountered as riders venture into ungroomed terrain. This includes methods of absorbing bumpy and choppy snow, and how we can blend absorption into our turns.

We will also introduce the concept of how we SCOPE the slope. This is a useful tactic snowboarders use to assess their Safety, the Capabilities to ride terrain, understand their Options and all the necessary Preparations needed before the Execution of a run. Students will require good edge awareness, and turn size/shape skills with a degree of adaptability riding different groomed terrain before venturing off-piste.

## INTRO TO OFF-PISTE



### WHAT, WHY, HOW

An introduction to riding off-piste terrain.

Develop some basic awareness of the skills needed to safely venture off-piste.

- ▶ Review the size and shape of turns. Focus on medium to small closed turns in a slightly lower position than you would normally ride. Utilise progressive flexion and steering from the lower body.
- ▶ A lower edge angle with relaxed ankles and knees will help to keep speed down, allowing the board to skid smoothly across bumpy terrain.
- ▶ Traverse out into the off-trail terrain at the side of the run, then find a suitable place to do a turn that is not too bumpy before traversing back to the groomer. Repeat this a few times on both sides of the run.
- ▶ Start linking turns down gentle off-piste runs remaining patient, making sure the turn is finished in a traverse and a balanced position is achieved before making a turn. Gradually remove the traverse as confidence grows.
- ▶ Now consider your line choice, by looking ahead for places that are less bumpy or choppy with smoother snow in which to make turns.



### TECHNICAL DESCRIPTION

#### LATERAL

Lateral movement should be appropriate to the snow conditions, keeping the rider's COM balanced over the edge. Focus on lower body lateral movement to create torsional twist, while keeping the upper body stacked over the hips. A lower edge angle will help the board to slide across the choppy snow.

#### VERTICAL

A lower vertical position will help to create stability and balance. Being relaxed with extension and flexion movements in the ankles and knees will help to maintain even pressure under the rider's feet.

#### ROTATIONAL

Smooth and progressive rotation through the lead knee, hip and shoulder is required to steer the board through the variable terrain.

#### LONGITUDINAL

A centred stance is preferable, though there will often be subtle weight shifts and adjustments happening due to the terrain. Consideration for snow conditions is needed. A little more movement toward the tail to create lift in powder and being able to regulate movement in sticky slush. Too much movement aft will limit steering movements.



## TERRAIN & CLASS HANDLING

Before taking any student into the off-piste it is crucial to assess the conditions and their ability to ride it. Develop the necessary skills on easy blue groomed terrain. Their first experience off-piste should be a green or easy blue pitch that is not too challenging.

Work through SCOPE (Safety, Capabilities, Options, Preparation, Execution) in your own mind and as a group if possible. Asking questions of yourself and your students is a great way to make sure that you have covered all the essentials before heading into the off-piste.

Consider the entry and exit points, the terrain and snow conditions and any terrain hazards that may exist. Present different options to ride in the off-piste, the size and shape of the turn required, options to traverse if needed and that it is okay to use a floating leaf if they find it too difficult. Being warmed up and having good working equipment, set up correctly, will help in preparation to ride off-piste. Once you feel confident that you have covered the above you should be ready to execute the run.



## SELF REFLECTION

"Were my students able to control their speed in the off-piste?"

"Did they manage to stay in balance?"

"Were the terrain and snow conditions appropriate to their level?"



## ENVIRONMENTAL TEACHING EXAMPLE:

Before heading off-piste look for banks that are a bit choppy at the side of groomers and try traversing or doing garlands along them in tall and flexed positions to explore a more balanced position. You could also use a flat area and have your student try standing on their board in a tall position with their eyes closed. Then get down and wiggle their board. Try the same exercise with the student in a flexed position, then ask when they felt more balanced.



## DETECT & CORRECT

Student lacks confidence in off-trail:

- ▶ Use "follow me" to help your student with their line selection.
- ▶ Review turn size and shape with progressive vertical and lateral movement to promote confidence on-trail first.
- ▶ Offer your student options with line selection that will avoid or deal with snow conditions and obstacles.
- ▶ Look for less challenging terrain.

Student lacks speed control:

- ▶ Review skidded traverses with relaxed ankles and knees with a lower edge angle on trail then in the off-piste.
- ▶ Set focal points for the student to look at to help finish turns.
- ▶ Review turn size and shape, and ensure that the terrain choice is conducive to success and promotes confidence.
- ▶ Encourage your student to close both heel and toe turns to control speed.

Student lacks pressure control or the board chatters:

- ▶ Review smooth progressive vertical flexion through ankles/knees on toeside and ankles/knees/hips on heelside.
- ▶ On groomed terrain, try a straight run then progressively tilt and pivot the board into a sideslip to slow down on the edge that the student experiences chatter.
- ▶ Encourage a lower edge angle and looking across the hill through the control and completion of the turn in question.
- ▶ Check longitudinal and rotational alignment of the student through the completion of their turns.

## PASSIVE ABSORPTION



### WHAT, WHY, HOW

Softly absorb undulating or bumpy terrain with independent leg movement.

To maintain balance in the off-piste and begin exploring more of the mountain.

- ▶ While on green terrain, try gently moving up and down through a skidded traverse. Flexing in the ankles and knees on the toe edge and knees and hips on the heel edge while maintaining a balanced upper body without changing the edge angle.
- ▶ Try the same exercise gently moving up and down throughout medium, closed skidded turns on green terrain. Both legs will flex and extend smoothly at the same time.
- ▶ In mellow bumps, traverse across with relaxed ankles and knees, find a spot that looks okay to turn and traverse back on the other edge. Feel your legs moving up and down with the bumps while keeping your upper body stable and aligned.
- ▶ Notice how your legs moved separately as the board went up and over the bumps - first the front leg then the back leg. This is independent absorption. (Repeat this several times to build awareness.)
- ▶ Gradually remove the traverse as you feel comfortable and start linking turns. Remember to look for easier places to turn and stay a little lower with relaxed ankles and knees.



### TECHNICAL DESCRIPTION

#### VERTICAL & LONGITUDINAL

Relaxed and independent flexing and extending movement through the ankles, knees and hip joint are required to allow the board to maintain contact with the snow. Vertical position should be more flexed than the rider would use on trail. Some additional longitudinal movement may be required if the snow is sticky, slushy or powdery.

#### ROTATIONAL & LATERAL

These are similar to those used in the Intro to Off-Piste progression.



### TERRAIN AND CLASS HANDLING

Gentle, undulating terrain with good snow conditions is ideal for introducing students to this. Look for easy exit points back to groomed runs. Assess students' confidence levels and offer the option of doing a floating leaf if they lose confidence with their ability to turn. Plenty of mileage with feedback on the same terrain will help with decision making and line choice. Encourage students to look across the slope to aid in steering and completing turns.



## SELF REFLECTION

"Are my students able to maintain balance while turning in the off-trail?"

"Is the terrain too challenging for my students?"

"Is the terrain bumpy enough for them to feel independent leg movement?"



## EXPERIENTIAL TEACHING EXAMPLE:

Imagine that you have just upgraded your old mountain bike that only had front suspension to a new one with much bigger front and rear shocks. Your new bike is a dream to ride and you can hardly feel a bump in the track. Using your legs like your front and rear shocks will make it feel like you have a new board capable of gliding over the toughest terrain.



## DETECT & CORRECT

Student has a lack of flexion/extension and struggles absorbing pressure or changes in terrain:

- ▶ Encourage your student to use continual, progressive vertical movements in the ankles and knees.
- ▶ Whilst stationary, have your student explore their own personal range of vertical flexion and extension in their legs. By doing so, both you and your student gain an understanding of their natural range and flexibility.
- ▶ Check how stiff your student's boots are and see if this is affecting them.
- ▶ Check that your student's stance width is not limiting their vertical range. This can happen with stances that are both too narrow and too wide.

## ACTIVE ABSORPTION



## WHAT, WHY, HOW

Physically lifting the snowboard up and over bumpy terrain.

To develop an alternative and stronger method of absorbing terrain.

- ▶ With the board off and standing in an active stance, lift the front leg and spring gently off the back leg, landing on the front leg with the back leg landing just after. This is the same movement used in a bad ollie, where you do an ollie that lands nose first.
- ▶ Try this again with the board on, imagining that you are riding over a bump.
- ▶ Traverse across the groomed slope and make two or three bad ollies mimicking the movements needed to actively ride up and over bumpy terrain. Make a turn and practise on the other edge.
- ▶ Time the same movements to physically lift the board up and over gentle bumps while traversing, keeping the board in contact with the snow.

- Once feeling confident with this new movement try to blend it into your off-trail riding. Remember to still use a lower edge with smooth turning movements of the knee, hip and shoulder to steer the board.



## TECHNICAL DESCRIPTION

### LATERAL

A strong stable lateral position that has the hips and upper body balanced over the working edge is required. This position should also enable an appropriate edge angle to maintain edge grip but still allow the board to skid through turns.

### VERTICAL

Strong independent flexing and extending movement through the ankles, knees and hip joint is required to lift the board up and over bumps while maintaining contact with the snow.

### ROTATIONAL

Rotational movements should be smooth and progressive focused in the lead knee and hip, and timed with vertical flexion to aid in steering. A slightly lower position should still be used.

### LONGITUDINAL

There is often a subtle fore/aft movement happening with active absorption. This movement should be controlled to avoid moving too far to the nose or tail of the board. More longitudinal movement will be required as independent absorption is increased.



## TERRAIN AND CLASS HANDLING

Bumpy terrain similar to that used in passive absorption exercises will be the most appropriate place to begin and the same general class handling will be required. Students may tire quickly when using active absorption because of the extra energy needed. Watch for signs of fatigue and avoid riding bumpy terrain if students are not warmed up or feeling tired, as there will be a heightened risk of injury. Progress students to terrain with bigger features, like man-made rollers, and increase speed as their timing and range improves.

Active absorption should be developed as a tactic to complement passive absorption rather than the main method of riding off-piste terrain. Encourage students to be careful with how much independent power they use in their legs as too much can lead to inefficient riding and falls.



## SELF REFLECTION

*“Are my students able to coordinate the movements of a bad ollie before heading off-trail?”*

*“Did my explanation of how to actively absorb bumps and undulations make sense to my students?”*



## ENVIRONMENTAL TEACHING EXAMPLE:

Set up a series of snowballs in a traverse line across a groomed slope and have your student try and make bad ollies over them. This will help in timing their movements, matching up to multiple bumps. You can also develop more power and range of movement in your students by turning the snowballs into larger snow stacks if the snow is mouldable.



## DETECT & CORRECT

Student struggles with the timing of active absorption movements and matching them to terrain:

- ▶ Have your student practise ollies, nollies and bad ollies.
- ▶ Find more suitable terrain with isolated bumps to develop timing of these movements.
- ▶ Try pre-jumping a bump with a bad ollie or using a “follow me” approach.
- ▶ Utilise long traverses across multiple bumps to develop more sequential movements.
- ▶ Encourage your student to use verbal cues for timing such as counting or singing/humming a tune.

## SECTION E - TEACHING INTERMEDIATE SNOWBOARDERS

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# Exploring Carving

INTRO TO CARVING



EARLY EDGE CHANGES



DEVELOPING CARVING



## IN THIS CHAPTER WE WILL EXPLORE...

Tasks and concepts aimed at introducing carving, also known as edged turns. These tasks are aimed at intermediate riders within the exploration stage of development. When put together, these tasks make up a detailed progression for introducing and developing carving as a riding option. They can be used as a series of exercises as part of a longer progression, or individually to build particular skills in your students' riding.

The concept of carving is to tilt the board enough so the edge grips and cuts through the snow with less skid (see Turn Types in Chapter 6), utilising the board's site-cut more to shape the turn. Students will require a variety of turn sizes and shapes, before learning to carve.



## INTRO TO CARVING

### WHAT, WHY, HOW

Introducing carving through the bottom half of a turn.

To increase edge awareness and effective edging movements, and develop the feeling of having the snowboard hold an edge for an extended period, and work on pressure management when carving from the fall line across the slope.

- ▶ Stationary, with one foot out, feel the edge angle of the board by flexing through the lower body (angulating). Walk the board to one side leaving a narrow, slightly curved track in the snow. This is the side-cut working.
- ▶ Edged traverses, beginning on the side of the trail in a centred stance, with a focal point to traverse towards, slightly down and across the slope. Start moving with a skidded traverse towards the focal point. As momentum is gained, increase the edge angle by flexing through the ankles and knees on toeside / knees and hips on heelside, while minimising skid.
- ▶ Allow the side-cut to gently turn the snowboard back up the hill to a stop. Repeat several times until comfortable maintaining an edged traverse all the way across the slope.
- ▶ Now make a gradual transition from a traverse across the hill, to a series of deeper edged arcs, which progressively increase in momentum. In each arc, flex down progressively throughout the arc as speed is increased, focusing on good angulation in the body. Be progressive with edging and pressuring through the completion of the arc.
- ▶ When comfortable, add more speed to the edged arcs by spending a little more time in the fall line. Include a progressive, whole body rotational movement in the direction of travel to change the arc into more of a carved J shape, pointing the nose slightly back up the hill. This will encourage steering through the completion of the turn.
- ▶ Link these together, removing the slight uphill steer, focusing on maintaining a carve from the fall line through to the completion of the turn.





## TECHNICAL DESCRIPTION

### LATERAL & VERTICAL

The COM should be balanced over the uphill edge throughout these tasks. Vertical and lateral movements need to be well blended to achieve a carved turn. Flexion through the ankles, knees and hips should be used to create angulation in the body, help increase edge angle and maintain stability. Heelside angulation should be through the knees and hips mostly; however, it is also useful to encourage dorsi flexion in the ankles, gently pulling the toes up inside the boots. Toeside angulation should be focused in the ankles and knees by progressively driving the knees over the toe edge. Maintaining dorsi flexion in the ankles is crucial here. A small amount of flex will also be required in the hips to ensure an active stance is maintained.

### ROTATIONAL

Looking in the direction of travel with progressive steering through the whole body should be encouraged in the latter parts of this progression.

### LONGITUDINAL

Students should remain centred over the side-cut.



## TERRAIN AND CLASS HANDLING

Start on a flat area for the stationary step, then progress to terrain that the student feels comfortable to make turns on, without skidding the snowboard too much to slow down. Ensure that the slope is groomed wide enough to comfortably make medium to large turns. Remember that snow quality will also play a large part in the success of these tasks.



Safety is very important in all tasks that cross the width of a slope. Be aware of other slope users and encourage this within your students. Remember to look uphill for traffic. Address regular and goofy by showing both heelside and toeside tasks. Once they have attempted a task once, let them practise in their own time by setting a stopping point further down the run. It may take a few runs to work through all the tasks in this progression.



## SELF REFLECTION

*“Do my students understand the use of side-cut?”*

*“Can they maintain an edge on both the toeside and heelside?”*

*“Are they blending their vertical and lateral movements efficiently?”*



## EXPERIENTIAL TEACHING EXAMPLE:

Comparisons with how we use a knife in our everyday eating are excellent for this level of rider. Discuss how they would spread a lump of soft butter onto a fresh piece of bread without tearing a hole in the bread. Then talk about cutting a thin slice of cheese to put on top of the bread. Now you have the comparison between a skidded and carved turn.



## DETECT & CORRECT

Student has difficulty maintaining a higher edge angle:

- ▶ Check equipment for a snug boot and binding fit.
- ▶ Check the lateral alignment of their mounted binding position. If the bindings sit closer to the heel edge your student’s COM is already favouring the heels and will make it harder to create tilt over the toe edge.
- ▶ Ensure your student has sufficient highback forward lean.
- ▶ Encourage them to move COM inside the turn as their speed increases.
- ▶ On the heelside, ensure that your student is not over-flexed at the hips. Encourage them to keep their upper body stacked upright over the hips.
- ▶ On the toeside encourage the feeling of continually increasing pressure in both shins and focus on keeping the hips stacked over the toe edge.

Student loses balance inside the turn:

- ▶ Review an efficient stance over both heel and toe edge, highlighting kinesthetics specific to each edge.
- ▶ On the toeside, ensure use of flexion movements through the ankles and knees with a more upright upper body to promote more stability over the board.
- ▶ On the heelside, ensure that your student does not over-flex through their knees and hips too early in the turn. This will ensure they still have some vertical range left to use as the forces increase later in the turn.

## EARLY EDGE CHANGES



### WHAT, WHY, HOW

Through the Intro to Carving tasks, we have increased edge angle from the fall line through the completion of the turn. We now concentrate on creating a higher edge angle earlier in the turn.

The ability to change edges earlier in the turn will help to manage increasing speeds when carving and in other riding.

- ▶ Utilise some flatter terrain with a very gentle pitch like a cat track to introduce the concept of edge rolls. Using a very open turn shape focus on keeping the lower body loose and relaxed, whilst using the ankles to gently roll from edge to edge, trying to remove any pivot within the board and keep the upper body quiet.
- ▶ Work through the movements of an early edge change in a carved turn while stationary to create understanding of the movements required before momentum is introduced. The timing of the edge change should occur at the most extended position vertically, but before the fall line.
- ▶ Link together a few large, closed edged turns, allowing time during the traverse to prepare for the next turn. Focus on projecting the COM into the new turn and changing edges before the snowboard enters the fall line. Remember to reduce the edge angle and skid the board when travelling across the hill if speed becomes an issue.
- ▶ Once comfortable, discuss the timing of flexion and extension movements, focusing on lifting the hips up and over the board at the edge change, then progressively flexing throughout the control and completion phases.
- ▶ When comfortable with an early edge change, try some edge rolls across the fall line or hanger turns to experiment with the timing of the edge change and the ability to move across the board with limited rotation. In these tasks, try to roll onto the downhill edge for a brief moment when travelling across the fall line, then come back to the uphill edge. This can be repeated a number of times, depending on the width of the slope, before committing to the full carved turn. Movement across the board using the lower legs is crucial to the success of this task.





## TECHNICAL DESCRIPTION

### LATERAL & VERTICAL

A greater range of vertical movement will be required to manage the increased pressure due to greater forces acting on the rider. Gradual flexion focused through the ankles, knees and hips will be necessary to increase angulation, help create tilt and maintain stability. The COM will need to be moved laterally into the new turn. Encourage soft lateral movements in the lower body to remain balanced when changing the edge early in a turn. Dorsi flexion in the ankles is important on both the heel and toe edges.

### ROTATIONAL

As with the Intro to Carving tasks, a progressive whole body rotation, as well as looking in the direction of travel, will help to steer the snowboard through the completion of the turn.

### LONGITUDINAL

A centred stance should be encouraged throughout these tasks.



## TERRAIN AND CLASS HANDLING

Use terrain that is well within the student's ability. The same terrain that has been used for the Intro to Carving tasks is usually suitable; however, finding a slightly flatter pitch for the edge rolls can be beneficial. Remember that snow quality will still play a large part in the success of this lesson.

As with the previous carving tasks, ensure that your students look uphill before starting across the trail. Make your students aware of the situations where carving is appropriate. Ensure that you emphasise blind spots when carving through the heelside turn, as crashes can be common here. Remember, skidded turns will still be used in certain situations. Checking for forward lean in the highbacks will help with the creation of edge angle, particularly on the heelside. Ensure the student is confident with and understands the increased speeds required to generate a higher edge angle. Confidence for this should be built up using the edged arcs and edge Js, in the previous progression. The more the snowboard is flexed and tilted, the tighter the turning radius becomes.



## SELF REFLECTION

*"Are my students confident enough with the speed required to make an early edge change?"*

*"Are they still pivoting or twisting the board in the initiation of the turn?"*



## ENVIRONMENTAL TEACHING EXAMPLE:

Use the snowboard's track in the snow to provide instant feedback on edge angle and timing of edge change. A wider track indicates skidding, a narrower track is a sign of a stronger edge. Encourage the student to listen to the snowboard's edge grip - carving is quieter than skidding. Utilise natural terrain to give your students the feel of an earlier edge change. By having your students ride on the downhill edge while travelling across a side hill or bank, you can explain and encourage the concept of an edge change across the hill or before the fall line.



## DETECT & CORRECT

Student lacks speed control or has difficulty creating a closed turn shape:

- Review turn shape and reconsider your choice of terrain.
- Encourage your student to complete both their heel and toe turns, focusing on the sensation of deceleration before thinking about their next turn.
- Ensure they are looking across the hill in the completion of every turn.
- Review the use of flexion movements and the effect this has on the side-cut of the snowboard relative to a closed shape.
- Encourage your student to stay mobile while riding and continually move vertically/laterally.

Student pivots their board at the initiation of the turn:

- Review the blend of vertical and lateral movements to help with the early edge change.
- Have them focus on balancing their hips of the downhill edge before the snowboard enters the fall line.
- When they move onto their downhill edge, try to keep the board travelling across the hill for a moment before the side-cut engages and steers them into the fall line.

Student inclines on the toeside, due to excessive lateral movements of the upper body across the board to change edges early:

- Review how the different parts of the body can move laterally.
- Encourage movement of the hips and knees across the board to change edges.
- Focus them on keeping their head upright and maintaining a level horizon in their line of sight.
- Encourage early but gentle pressure with the shins touching the tongues of the boots.

## DEVELOPING CARVING



### WHAT, WHY, HOW

Using various tasks and drills to explore and improve the movements for intermediate level carving.

To improve range of movement, timing and balance while carving, and provide more confidence with speed.

The following tasks can be used in any order to help develop carving...

Hopped edge changes:

- ▶ Start by bouncing through a traverse in between carved turns, taking notice of the different stance positions from heel to toe.
- ▶ Add some hops to the bouncing when comfortable, taking off and landing on the same edge.
- ▶ Start to work the bouncing into the turn then add the hopping as confidence increases, then take out any traverse and link the turns together. Keep in mind that landing with a lower edge angle may create skid. When timed well, the edge change will occur in the air.

Flasher turns (or board-sponsor turns):

- ▶ Try to flash the base of the snowboard up the hill at the edge change. This encourages a quicker and more aggressive edge change.
- ▶ In pairs, take it in turns to stand uphill from each other to check how much of the base on your partner's snowboard you can see.
- ▶ To make it more challenging, increase the pitch of the terrain or try maintaining a true carve throughout the entire task. Ensure that riding speed is sufficient for these tasks to avoid any quick loss of balance or falls inside the turn.

Indy grab carves:

- ▶ Use indy grab carving to improve vertical range of movement on the heelside, by reaching down progressively and touching the toe edge with the back hand.
- ▶ With the increasing range of movement, try holding the grab through the bottom of the turn by flexing through the knees so the trailing shoulder becomes level (or close to level) with the trailing knee.





## TECHNICAL DESCRIPTION

### LATERAL AND VERTICAL

A quick but precise movement laterally will be necessary for all of the previous tasks. A larger range of movement vertically will be needed for indy grab carves.

### LONGITUDINAL AND ROTATIONAL

These movements do not change from regular carved turns.



## TERRAIN AND CLASS HANDLING

These exercises should be used as developmental tools for intermediate level carving. Wide, green or blue groomed trails are most suitable for these tasks. Let your students use large stretches of the runs, possibly even riding from top-to-bottom in some tasks. Pairing students up is an ideal way to manage a group when doing this.

To progress the student's ability, have them see how efficient they can make their hop at the edge change, how early they can flash the base of their snowboard up the hill, or how long they can hold the grab for.





## SELF REFLECTION

*“Do my students have the physical ability to increase their range of vertical enough to grab their edge?”*

*“Do they have the strength to hop at the edge change?”*



### EXPERIENTIAL TEACHING EXAMPLE:

You're in an Indiana Jones movie, there is an abandoned mine with a railway track that winds down into the mine. You are racing along in a small carriage or cart having to lean as you go around the corners on two wheels to keep from falling off the tracks. You come around an 'S' bend and see that part of the track is missing on the side you're balancing on. You manage to hop the cart onto the other track, gently leaning to balance on the other wheels. As you come around the next bend the same thing has happened to the track you're on and you have to hop to the other track again.



### DETECT & CORRECT

Student loses grip through the control and completion of the heel turn:

- ▶ Check highback forward lean.
- ▶ Focus on even vertical movement through both knees and a gentle lift of the toes.
- ▶ Focus their attention on how quickly the board is edging, and try to blend vertical and lateral movements together to make this more progressive.
- ▶ Ensure your student remains longitudinally centred so that the entire length of the side-cut is pressured and provides grip through the turn control and completion.

Student struggles to get the board off the ground in the hopped edge changes:

- ▶ Ensure they are taking off from a strong platform with a medium edge angle - not too high that they can't move across the board and not so low that the board slips when they hop.
- ▶ Promote a disciplined upper body so the bounces and hops come from the legs.
- ▶ Focus on taking off from two feet and retracting the legs slightly in the air.

Student struggles to reach their toe edge in the indy grab carves:

- ▶ Try to increase range of movement through the knees specifically and balance this with flex through the hips.
- ▶ Work on keeping the butt closer to the edge of the snowboard and trying to get the tricep on the trailing arm next to the trailing knee.

## SECTION E - TEACHING INTERMEDIATE SNOWBOARDERS

17

# Exploring Freestyle

**OLLIES****NOSE ROLLS & SWITCH  
NOSE ROLLS****FRONTSIDE 180S****BACKSIDE 180S****INTRO TO PARK****INTRO TO JUMPS****INTRO TO BOXES & RAILS**

## IN THIS CHAPTER WE WILL EXPLORE...

A series of tricks to explore freestyle riding both outside and inside the park. There is an introduction to park safety and the ATTL model, to help breakdown each trick.

Freestyle is often one of the main reasons why people first start snowboarding. Remember that, whilst extremely popular, freestyle is not for everyone. Be mindful of your students' interests and do not push them into freestyle if they appear uncomfortable. The tricks in this chapter are fundamental tricks required to become a well rounded freestyle snowboarder. Students will need a variety of turn sizes and shapes before learning these tricks. In some tricks, students will require the ability to flat base and ride switch, for either approach and take off or to land the trick.

## OLLIES



### WHAT, WHY, HOW

A controlled jump, taking off from the tail of the snowboard and landing with a flat base.

An ollie gives riders the ability to get air off many natural features or flat ground and allows them to practise jumping before heading into the park.

- ▶ On flat ground in a solid centred stance, move the hips towards the tail of the snowboard at the same time as pulling up the front foot to perform a “wheelie”. Keep the shoulders level to the ground when doing this. This helps load the tail of the board.
- ▶ Jump off two feet while stationary. Try to takeoff and land with a flat base. Now combine these two movements and takeoff by springing from the tail of the snowboard, pull the knees up equally in the air and land centred over both feet. Keep looking up to help with balance.
- ▶ On a gentle pitch at slow speeds, practise the hop and “wheelie” separately.
- ▶ To perform the complete trick, blend the two movements together (just like in the stationary practice) whilst riding at a slow speed (the focus here is on timing and not the amplitude of the trick).
- ▶ When comfortable, ride a little faster and look for flatter, mellow areas to keep practising.
- ▶ Develop the trick by adding more power and/or range of movement to an efficient movement blend to create a higher ollie.



### TECHNICAL DESCRIPTION

#### LONGITUDINAL

The student should try to utilise the natural flex of the snowboard to assist them with the ollie by shifting the COM towards the tail of the snowboard or shifting the snowboard under the COM by shuffling the board forward. The flex and rebound from the tail can increase the height achieved. The COM is returned to the centre of the board for landing.

#### VERTICAL

The more range of movement a student exhibits in the vertical plane, the bigger the resulting ollie. The rider must begin with flexed ankles, knees and hip joints, and make a strong extension to lift the board into the air. The knees should be sucked up towards the COM in the air to increase stability. For landing, the legs should be extended, then flexion in the ankles, knees and hips is used to absorb the impact.

## LATERAL

A neutral position is best so that students can takeoff from a flat base for stability. Students may find it beneficial to pressure the toeside edge slightly when taking off and landing. This utilises the ankle joint for a greater range of movement and increased pop.

## ROTATIONAL

Rotational movements should be kept neutral with the body remaining rotationally “quiet” to maintain stability.



## TERRAIN AND CLASS HANDLING

A flat area with minimal traffic is advisable to begin this exercise. A gentle pitch to progress to is also necessary. Choose terrain that students can ride a flat base on for several seconds without picking up too much speed. This will allow ample time to make the required movements without onset of fear. To complement this, ensure that areas of low traffic are selected so students feel like they have enough space to practise.

In larger groups ensure students are even more aware of their surroundings, more specifically each other. It's common for students to focus heavily on themselves, making it easy for them to pick up speed and catch up with students in front, leaving minimal time to slow down.





## SELF REFLECTION

"Is my terrain selection mellow enough to promote success and build confidence?"

"Can my students even create an ollie on flat ground before trying whilst riding?"

"Do they have the physical strength to bend the board and pop into the air?"



### EXPERIENTIAL TEACHING EXAMPLE:

Your students play the drums and can relate the feeling of pressure under their foot to create a beat from the bass drum. When teaching your ollie, you get students to imagine they have a bass drum pedal under each foot. To help them with timing, you explain that they should jump off the bass drum pedals, front foot first followed by rear foot and land evenly on both pedals to create one beat. If they are creating a double beat when they land then they are landing on each bass drum pedal separately.



## DETECT & CORRECT

Student jumps off both feet when performing an ollie:

- ▶ Explain and practise pulling the front foot up first to pop off the tail.
- ▶ Have your student explore their longitudinal range and its effect on the board. Students are often surprised how much more they need to move longitudinally to get closer towards the tail.
- ▶ Ensure that your terrain selection is accommodating for mileage over a flat base without gaining too much speed.
- ▶ Start with small ranges of movement and increase energy and effort as timing improves.

Student keeps landing on the nose of the board:

- ▶ Focus on when the ollie is released. The pop from the vertical extension of the back leg is often released too late and the COM projected towards the nose.
- ▶ Have students practise their "wheelies" and get to know exactly when their snowboard is going to rebound. With this knowledge, students will begin to understand that they should release their rear leg extension just before the board rebounds.

## NOSE ROLLS & SWITCH NOSE ROLLS



### WHAT, WHY, HOW

A 180 degree roll over the nose of the snowboard that can be performed in both forwards and switch directions.

To improve balance, experiment with moving longitudinally, and to progress towards other pressuring tricks like butters and presses on boxes.

- ▶ On flat ground and move the hips along the length of the snowboard, pressuring first the nose then the tail. Ensure that a nose press can be created and held whilst stationary.
- ▶ Use a back up turn progression to teach the spinning movements necessary to pivot the snowboard through 180 degrees. (Begin with frontside rotations so that students can always see where they are going, always starting on the heel edge and finishing on the toe edge - see Chapter 14 on Exploring the Turn.)
- ▶ To perform the whole nose roll, begin in a centred stance and guide the nose of the snowboard into the fall line. Once a comfortable speed is reached, steer across the hill over the heelside edge (utilising the back up turn).
- ▶ When the nose of the board is pointing back up the fall line over a flat base (and speed is minimal or zero), move the hips over the front foot and pull up with the back foot, lifting the tail of the snowboard off the snow (utilising the nose press from stationary practice). Release the press and move the hips over the new edge and ride away switch.
- ▶ Through mileage, turn the snowboard less uphill and spin the tail of the board in the air as the hips move over the nose. Make sure the hips move towards the nose smoothly as the body turns to blend the press and spin. With comfort, when riding in a traverse, use more power when moving the hips over the nose and turning the body to spin the board. This will help to create the trick in a traverse with minimal turning up the hill.
- ▶ These manoeuvres can be executed either forwards or switch, pivoting off the nose or tail (switch nose) of the snowboard. Additional exercises to progress onto include stalled rotations, nose ollies (nollies) and combining nose/switch nose rolls with 360 spins.





## TECHNICAL DESCRIPTION

### LONGITUDINAL

Longitudinal movement is the key to this exercise. The COM must be moved towards the nose of the snowboard, to bend the board and create a pivot point under the front foot to rotate around. Pressure is then returned to the centre to complete the manoeuvre. Be aware that the flex of the snowboard can greatly affect the outcome of this task and should be considered when providing feedback.

### ROTATIONAL

Strong rotational movements of the hips, legs and upper body are used to generate the required rotational momentum. It will help to use some rotational pre-wind to store energy from which to release the trick.

### VERTICAL

Vertical movement will assist to release the blend of longitudinal and rotational movement from the edge. Flexion in the lower body is required to absorb the impact of the nose or tail of the snowboard returning to the snow.

### LATERAL

A lateral movement across the board is essential to maintain balance as the edge change occurs.



## TERRAIN AND CLASS HANDLING

Wide green or easy blue trails are suitable to teach nose rolls on, provided that you have checked that your students are comfortable. It could be beneficial to check if your students can ollie and control their speed in a switch traverse as a minimum for their switch riding ability. Encourage your students to spin frontside from heels to toes. This will be easier for them, as the trailing end of the board is rolled downhill, with the pressing end uphill, stopping the snowboard catching on the snow.

This progression will require students to spend time in traverses on their heel edge so it's important to choose low traffic zones and encourage students to check their blind spots. With larger groups, it can be useful to pair students up to educate them about spotting for each other as they attempt their trick.



## SELF REFLECTION

*“Can my students ride switch or show some confidence in switch elements of the back up turn?”*

*“Is my student able to bend their board in a stationary environment before trying this trick?”*



## EXPERIENTIAL TEACHING EXAMPLE:

Your students enjoy kickboxing classes to keep fit. You liken a nose roll to a roundhouse kick. You explain how you wind up to store power for the kick, release the kick whilst balancing on one foot and follow through by turning the whole body to then finish in your unnatural kickboxing stance, either orthodox (left foot forward) or southpaw (right foot forward) depending on the individual. This can also be done starting in an unnatural kickboxing stance and returning to a natural stance.



## DETECT & CORRECT

Student cannot complete a full 180 during nose/switch nose rolls:

- ▶ Work on blending longitudinal and rotational movements smoothly.
- ▶ Encourage use of a traverse, even turning more uphill before releasing the trick. This use of the side-cut and natural turning direction will aid rotation.
- ▶ Introduce/review the use of pre-wind to help rotationally prepare and store power for the trick.

Student uses counter-rotation to complete the full nose roll:

- ▶ Focus on the pre-wind, bringing the front hand down to the trailing knee on the approach.
- ▶ Encourage strength in the core throughout the rotation.
- ▶ Use vertical movement to help blend the other movements.

## FRONTSIDE 180S



## WHAT, WHY, HOW

A half rotation in the air spinning with the front of your body facing in the direction of travel during the spin. This is clockwise for goofy and anticlockwise for regular riders.

This is usually the easiest spin trick, as the student can see where they are travelling the entire time. It is also the foundation for any frontside spin.

- ▶ On flat ground with the snowboard off explain the difference between frontside and backside spins, then try to spin a frontside 180. Frontside is when the chest and body turns to face the direction of travel when starting the spin. Try them forwards and switch. Jump, spin 180 degrees, retract the legs and land with the feet in the same marks in the snow. It may help to pre-wind by turning the upper body against the direction of spin to store energy to release when taking off. Keep looking up to help with balance and imagine riding away.

- ▶ Practise hopping off the heel edge by extending the knees and hips whilst traversing the slope. Do the same switch to practise landing switch.
- ▶ Practise a skidded 180 by traversing on the heel edge at a comfortable, pre-wind and release the spin by turning the shoulders and hips uphill to spin the body and board through 180 degrees, to ride away switch on the toe edge. A back-up turn progression can be used as an alternative (see Exploring the Turn in Chapter 14).
- ▶ In a heelside traverse, perform a hop off both heels, followed by a pre-wind and skidded 180, followed by a hop off the switch direction toe edge to practise the takeoff, spin and landing.
- ▶ For the full 180, blend the hop and spin together in a heelside traverse using power from the pre-wind. Ride slowly to start with to build confidence and gently increase the speed. For each attempt, ensure a strong edge is used to maintain a platform to release the trick from.
- ▶ Once all the movements are beginning to blend, use natural terrain that your student can ride into on their heel edge, i.e. banks, cat tracks or bumps to help create some extra airtime for the 180.



## TECHNICAL DESCRIPTION

### ROTATIONAL

The spin is led with the shoulders and arms. The lower body follows once in the air and rotates past the upper body to land. The head stays in the same position throughout the entire process.

### VERTICAL

Focus on flexing and extending the ankles, knees, hips and lower spine. This is used for pop and to retract in the air. It is also necessary for extension and flexion to absorb the landing.

### LATERAL

Takeoff can be from toe or heel edge, depending on the rider's preference. Taking off from the heel edge is more natural for the rotation, but taking off the toe edge will help increase the pop vertically as the rider can utilise their ankle joint. Landing on the opposite edge will help minimise edge catches.



**LONGITUDINAL**

A centred stance is the key to taking off and landing on both feet. Students who are comfortable with an ollie may find pressuring the tail when taking off slightly easier but it is not necessary to perform the trick.

**TERRAIN AND CLASS HANDLING**

Begin on a flat area for stationary tasks and then progress to a mellow blue or green run depending on student comfort levels. When riding through the progression towards a frontside 180, be aware that there is a lot of time spent in a traverse on the heel edge of the snowboard. For this reason have students constantly checking their blind spots paired with sensible use of space, and consideration for traffic. If choosing to teach frontside 180s from the toe edge, a big focus on avoiding edge catches will be required.

**SELF REFLECTION**

*“Are my students travelling with enough speed and across the fall line to help them maintain a platform to take off from?”*

*“Can my students blend their vertical and rotational movement smoothly enough in both the pre-wind and the 180 itself?”*

**ENVIRONMENTAL TEACHING EXAMPLE:**

As it can be more of a challenge for students to create pop from their heel edge, show students how to use small undulations and changes in the snow to use as a takeoff. This can be easier later in the day as small bumps and lips appear. The key is to educate your students on how to spot them.

**DETECT & CORRECT**

Student struggles to pop off their heel edge:

- ▶ Focus on vertical movement through the knees whilst keeping the toes up inside their boots.
- ▶ Ensure students can generate edge in a traverse without the hop first, an edged traverse could be very useful here.
- ▶ Ensure that they are not over-flexing through the hips.

Student has trouble creating a smooth full rotation (usually the upper body rotates too far into the spin without using “scissored” finish in the lower body):

- ▶ Review how to jump and spin on flat ground, rotating with the whole body.
- ▶ Focus on the timing of the rotational release from a pre-wound position. Ideally, this will be just as the shoulders pass the point of rotational alignment with the board.
- ▶ Ensure that pre-wind is being used effectively and the student is not simply moving their arms. Focus your eye on their hips and core to analyse how much rotation is being used to pre-wind.

## BACKSIDE 180S



### WHAT, WHY, HOW

A half rotation in the air, with your back facing in the direction of travel during the spin. This is anti-clockwise for goofy and for clockwise regular riders.

The backside 180 is considered a must-have for any aspiring freestyle rider. It creates a thrill as the student has their back turned in the air to the direction they are travelling. This is the foundation for all backside spins.

- ▶ On flat ground with the snowboard off, explain the difference between frontside and backside spins, then try to spin a backside 180. Backside is when the back turns to face the direction of travel when starting the spin. Try them forwards and switch. Jump, spin 180 degrees, retract the legs and land with the feet in the same marks in the snow. It may help to pre-wind by turning the upper body against the direction of spin. Looking back towards the approach and takeoff throughout the spin will help with balance and avoid over-rotating.
- ▶ Try this with the snowboard on, still on flat ground. The upper body can be used to help generate the spin. Don't be discouraged if less than 180 degrees is achieved at this stage.
- ▶ Progress to quiet terrain and practise hopping off the toe edge by extending the ankles, knees and hips whilst traversing the slope. Do the same in the switch direction to practise landing switch. Continue to practise this switch and develop by looking in the opposite direction of travel whilst hopping (as long as it is safe to do so).
- ▶ Use a back up turn progression (see Chapter 14) to teach the rotation necessary to spin the snowboard through 180 degrees. Include the use of pre-wind and the timing of it to help with the spin.
- ▶ To perform the full 180, begin in a centred stance and guide the nose of the snowboard into the fall line. Once a comfortable speed is reached, steer across the hill onto the toeside edge (utilising the back up turn). When the nose of the board is pointing back up the fall line (over a low toeside edge angle and speed is minimal or zero), jump off both feet, retract the legs and land on the new edge to ride away switch. Look back towards the takeoff for balance and to stop over-rotating.
- ▶ Through mileage, turn the snowboard uphill less and hop earlier to allow the board to spin more in the air (this will require the pop to be blended with the release of the spin).
- ▶ With comfort, in a toeside traverse, use a pre-wind before releasing the jump and spin. This will help to create the trick in a traverse with minimal turning up the hill.
- ▶ Once all the movements are beginning to blend, use natural terrain that your student can ride into on their toe edge i.e. banks, cat tracks or bumps to help create some extra airtime for the 180.



## TECHNICAL DESCRIPTION

### ROTATIONAL

The spin is led with the shoulders. The lower body follows from takeoff and once in the air rotates past the upper body to land. Looking down and back towards the takeoff point throughout the spin will help to avoid over-rotating.

### VERTICAL

Work on retracting the legs towards the COM to give the snowboard time to rotate. Focus on flexing and extending the ankles, knees and lower spine.

### LATERAL

Taking off from the toe edge is more natural for the rotation and will help increase the pop vertically as the rider can utilise their ankle joints. When performing a backside 180 from a toeside traverse it is important to land on the heel edge. When trying it over a park jump, pressuring the toe edge during takeoff and landing will aid the spin and help to stop over-rotation and edge catches.

### LONGITUDINAL

A centred stance is the key to taking off and landing on both feet.



## TERRAIN AND CLASS HANDLING

Begin on a flat area for stationary tasks and then progress to a mellow blue or green run depending on student comfort levels. Take some time to ensure that students are comfortable getting their snowboard off the ground and also with switch riding. As the landing is blind, a lot of trust is needed from you as an instructor so select areas of low traffic and terrain that can offer a calm environment to learn in.





## SELF REFLECTION

*"Is my student comfortable enough to ride away switch without looking where they are going?"*

*"Are nerves making my students tense in their ankles and knees causing instability?"*



## ENVIRONMENTAL TEACHING EXAMPLE:

Have students focus a lot more on their surroundings for the backside 180 as eyeline and visual cues are a powerful teaching tool. During the approach and takeoff, pick out an object/marker that keeps their eyeline up and level to avoid over flexing at the hips. During the transition from trick to landing, focus on looking back towards the takeoff, more specifically the point in the snow where your track ends when you released your trick.



## DETECT & CORRECT

Student has problems popping off two feet and ends up rolling over the nose:

- ▶ Focus their attention on springing with the ankles and using them at the same time to generate pop.
- ▶ Encourage a slightly later rotation just as the board pops into the air.

Student has trouble riding into or out switch:

- ▶ Review elements of the linked turns progression in switch to increase confidence riding switch.
- ▶ Reinforce movements fore and aft to aid initiation with the new front foot.
- ▶ Challenge your student with switch flat base tasks including hops to develop the movements required to take off and land in their switch direction.
- ▶ Ensure the size of the feature is suitable for their comfort and skill level.

Student reverts on landing:

- ▶ Ensure that the student is not looking for their landing.
- ▶ Work on rotating the head separately to the core, only looking in the direction of travel after the board has touched down and they are stable on their edge.
- ▶ Reduce the amount of upper body rotation used and focus on rotating more through the hips.
- ▶ Encourage a slight toe edge or flat base landing, before rolling to the heel edge.

## INTRO TO PARK



### WHAT, WHY, HOW

Bringing students to the terrain park for the first time.

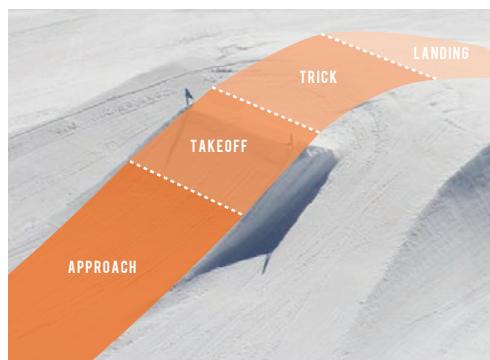
To create awareness around park etiquette and signage, the different types of features and how to ride them, and how snowboarders can prepare for park riding outside of the park.

Outside-in concept:

- ▶ Make use of the available terrain before reaching the park to grow confidence and get warmed up. This can be as simple as making a variety of turn sizes and shapes.
- ▶ If capable, this can also include some ollies and switch riding (be aware that these are not required skill sets but are beneficial).
- ▶ Between turns, explore riding over a flat base (when safe to do so) with an active stance and explain its relevance to park riding.
- ▶ Introduce speed checks. Riding across the slope, quickly and smoothly turn the knees and hips uphill as you turn your head and upper body downhill. The arms will naturally be slightly raised for balance and the core will feel slightly tense. When enough speed has been lost, release or unwind the light core tension to return to an aligned position riding across the slope. Do this over both edges. When comfortable, try them down the fall line from a flat base in both variations.
- ▶ If available, use rollers to try riding flat base and using speed checks.
- ▶ Let students know that at any level of park riding, there is always a way to prepare outside of the park, before riding inside the park. The considerations above are to prepare first-time park riders with the skills to control speed and line whilst riding between and to the side of features.

Approach-Takeoff-Trick-Landing:

- ▶ ATTL is a tool to help divide features into zones.
- ▶ Look at the **approach** to check the snow conditions, the length of the run in, the pitch and width of the run in and any early spill zones that can be used if the best line isn't taken.
- ▶ The **takeoff** should be inspected for snow conditions, pitch and height compared to the feature or gap.



- ▶ The **trick** zone can vary depending on the feature type. A box/rail feature will have a trick zone on the feature itself and a jump feature will have a trick zone in the air between the takeoff and landing.
- ▶ Ride through the **landing** zone to feel snow conditions, pitch and to see if it is level or bombed out with uneven bumps and ruts.

#### Features:

- ▶ When introducing park, focus on features that are small. They can be identified by small signs with an "S" on them.
- ▶ Small sized boxes will be close to the ground, ride-on, flat, often quite wide and usually the first features in the park.
- ▶ Small sized jumps will be tabletops or step-overs usually 5-10 feet in distance (2-3 metres) from the takeoff to the sweet spot in the landing (the steepest part). They are usually the first jump features in the park.



## TECHNICAL DESCRIPTION

### VERTICAL

Focus on a relaxed range of vertical movement, particularly in the ankles, knees and hips. Parks can often increase anxiety in students which can increase muscle tension, especially with their vertical movement.

### LATERAL

Movements laterally should be deliberate and precise to ensure a flat base can be used when required. The focus is with small and smooth movements in the ankles, knees and hips with a stacked upper body laterally on top of the board. The ability to create twist and tilt quickly with the lower body is beneficial within the park.

### LONGITUDINAL

Ideally, students remain longitudinally centred until they choose to move to the nose or tail when riding in the park. The focus should be largely on the board moving underneath the COM with the ankles and knees, for quick adjustments when needed in the park.

### ROTATIONAL

Ensure that students can show rotational alignment throughout their turns and when riding a flat base so they can build confidence in their ability to hold their line when they want to. The speed checks will add to their options for scrubbing off speed and challenge their early use of counter-rotation which can later be developed and drawn from for more advanced freestyle riding.



## TERRAIN AND CLASS HANDLING

This is a huge component of this lesson. It's crucial to review with your students how to call their drop, as well as highlighting safe stopping areas and spill zones from features. The focus here should be to pass on park etiquette and education to students so that they will continue to use the park safely even when they are not with you.

With any lesson in the park, ensure that you offer options for each skill set to include everyone, particularly in larger groups. Remember that park riding isn't for everyone so perhaps there is more you can do outside of the park to keep everyone in your group satisfied. Finally, ensure students recognise and can show you the arm signals "O" for open and "X" for closed.

As you ride through the park for the first time with your group ensure that everyone knows how to call their drop. Before dropping, ensure you have set a clear meeting area that is visible from the first drop in and clear of all features and landings. This can be a decision made as a group, highlighting pros and cons of any suggestions.

For your first run through, let students ride past features slowly to look at the zones of ATTL. It may take more than one run to gain confidence within a terrain park environment so as you ride more, encourage students to ride next to the features trying to match their speed to what might be suitable when hitting features. This way students can look at the takeoffs as they approach features and get an idea of the pitch of the landings. Through this process you are scoping the park and learning about the snow conditions, the condition of the takeoffs, landings and features themselves. Ensure that all scope laps are summarised with questions about what your students saw and continuing open discussion as a group. Realistically, if you are not going to focus your students' attention during a scope lap and encourage them to share what they saw, then there is little point taking the time to do so.

**PARK SMART**

**Start Small**  
Work your way up. Build your skills.

**Make a Plan**  
Every feature. Every time.

**Always Look**  
Before you drop.

**Respect**  
The features and other users.

**Take it Easy**  
Know your limits. Land on your feet.



## SELF REFLECTION

*“Do my students actually want to go in the park?”*

*“Do my students have control of their direction and speed through a variety of turn sizes and shapes?”*

*“Have I considered and used the “Three Cs” to build up their comfort and confidence before trying something new?”*



## EXPERIENTIAL TEACHING EXAMPLE:

Just like going to your first day of school when you were most likely nervous, unsure of what was going to happen, worried by what people thought of you, or scared you wouldn't fit in and that the school bully would hurt you, the terrain park can be equally, if not more, daunting. It's important to recognise that there are certain things you can prepare for in life and at some point you have to “jump in” and commit. Park riding is similar in that we can prepare our movements, our expectations and our understanding of how to ride safely to help build confidence. The rest is up to us; all that is left is to commit.



## DETECT & CORRECT

Student has trouble using counter-rotation to create a speed check (usually on the heelside):

- ▶ Find some flat ground and introduce the body position used during a speed check and more importantly, how to move into that position. It may help to have students jump into and out of the speed check.
- ▶ Focus on keeping the core muscles tight when the upper and lower body turn in opposite directions to help bring the body back into alignment over the board.

Student has problems judging their speed appropriate to the features:

- ▶ Ensure that they watch other riders and count the number of speed checks or turns they are making.
- ▶ Have the student follow directly behind you and match their speed to yours.
- ▶ Have them run parallel to you (or another rider), matching their speed to yours, but next to the feature instead of actually hitting it.

## INTRO TO JUMPS



### WHAT, WHY, HOW

Jumping off natural and man-made features.

To introduce skills to jump off features that have more transition through the takeoff (e.g. park jumps), to develop basic air awareness and build confidence.

Straight airs:

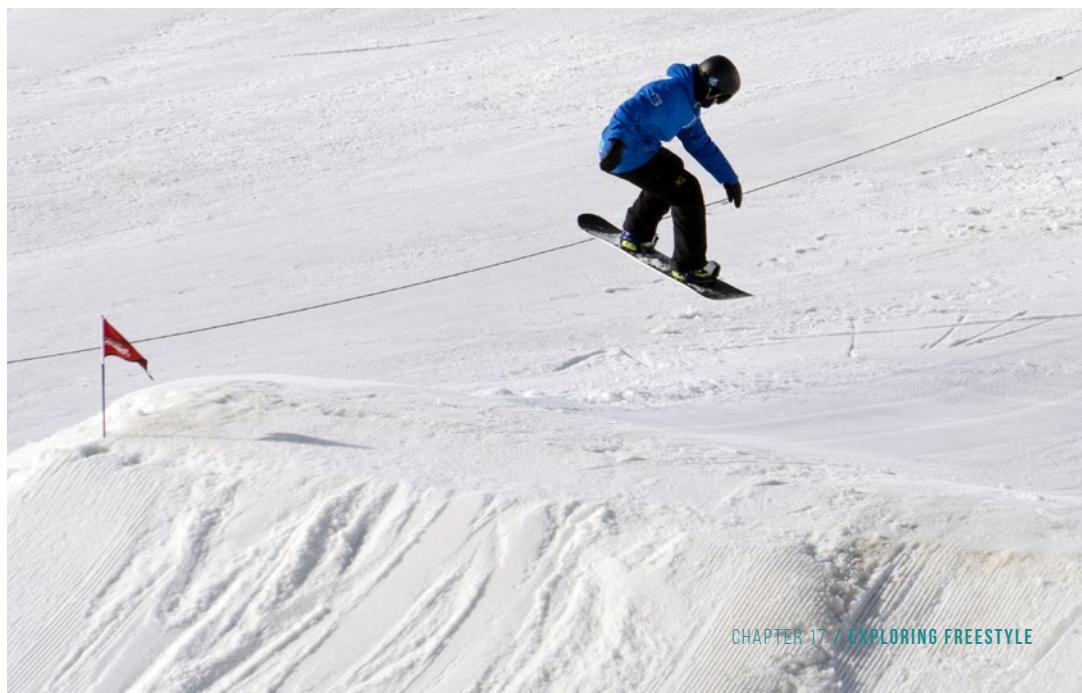
- ▶ Start stationary and practise hops from both feet (takeoff), a small retraction of the legs in the air (trick) and landing softly in the same spot (landing). Focus on a quiet upper body.
- ▶ Practise hopping off both feet from a flat base in the fall line (approach and takeoff). Focus on absorbing the landing through the ankles and knees (landing). Develop this by adding the small retraction movement in the air (trick).
- ▶ Hop off the side of cat tracks or natural terrain features from a flat base, approaching the feature in the fall line. Approach, takeoff, position in the air (trick) and landing can all be focused on one at a time through different tasks or attempts.
- ▶ Practise when to time the hop by drawing lines in the snow to jump over, focusing on allowing the nose to pass the line and jumping when the leading foot is at the line.



- ▶ Find a small and well-shaped park jump and describe what to expect within each zone of ATTL. Remind students to hop when the nose of the board has just passed the lip and the leading foot is at the lip. Watch others to help judge speed (including the demo), sideslip to a suitable drop in point, call your drop and commit.

Basic air awareness (retracting for grabs, pokes and shiftys):

- ▶ To develop basic air awareness, practise holding a compact body position in the air for a longer period of time before extending the legs for landing.
- ▶ Creating a competition around who can hold the retracted position in the air for the longest can be a fun way to learn this skill.
- ▶ To challenge the use of the legs in the air, find a tucked position then poke the front or back foot forwards/backwards/down (whichever is easier) by extending the front or back leg, before preparing to land.
- ▶ To frontside shifty, use flat ground to review using counter-rotation (used before in speed checks) and practise heelside speed checks from a flat base down the fall line. Make these movements quickly so that the speed check is created and released quickly, just as it will be done in the air with minimal time. Ride away on a flat base, looking in the direction of travel.
- ▶ Find a natural feature or cat track to jump off and make the speed check in the air, now called a frontside shifty. When comfortable, take this to a small park jump and focus on taking off as with the straight air before, then creating the counter-rotation required for the shifty. Release the frontside shifty and extend the legs to prepare to absorb the landing.
- ▶ To backside shifty, the above tasks in the frontside shifty can be replicated but with toeside speed checks.





## TECHNICAL DESCRIPTION

### VERTICAL

Movements vertically are the key to a good pop during takeoff and absorption on landing. Focus on moving through the ankles, knees and hips. Be aware that excessive flexion movements of the ankles, knees and hips that aren't well proportioned will result in an unwanted lateral by-product.

### LATERAL

Minimal movements are recommended at the early stages. Encourage students to take off and land on a flat board. To help this, ensure that flexion movements in the ankles, knees and hips are well proportioned.

### LONGITUDINAL

A centred stance is the key to landing on both feet and avoiding butt checks or going over the nose on landing.

### ROTATIONAL

Rotational movements should be avoided to maintain alignment and stability as students ride through each zone of ATTL (with the exception of shiftys, where a small counter-rotation movement should be used).



## TERRAIN AND CLASS HANDLING

Begin on flat ground, much the same as with the ollie. Progress onto gentle pitches with even fall lines. Look for small natural features to jump off before heading into the park. Airing off cat tracks is great for focusing on the landing and run-out of a jump, but be aware of hazards/traffic and keep speed low. Remember to start small and let students increase speed and amplitude as they choose to do so.

Now with more mileage in the park, continue to reference Park SMART. In a group, share this responsibility around and have students identify something relevant for each letter of SMART.



## ENVIRONMENTAL TEACHING EXAMPLE:

When riding the early steps in the progression you get your students to check their tracks in the snow to ensure that when they are hopping the base of the board is flat. When the trick is beginning to appear and needs developing, you can create hurdles or obstacles in the snow for students to time their hops over. This can be in the form of lines drawn in the snow (ground level obstacle) or snowballs or gloves placed to hop over (a challenge for timing but also amplitude of the trick).



## SELF REFLECTION

*“Do my students look stable over their snowboard when they land from a natural feature before attempting a park jump?”*

*“Can my students project their COM upwards from the snow without travelling laterally sideways?”*

*“Can they maintain strength through the transition of the jump?”*



## DETECT & CORRECT

Student lands sideways and catches their edge when jumping:

- ▶ Encourage shoulder alignment with the board and in the direction of travel.
- ▶ Ensure that the size of the feature is within your student's comfort zone.
- ▶ When your student is successfully landing jumps and is comfortably riding away, move them back to the original features they had trouble on.

Student flaps arms while in air:

- ▶ Reinforce a low, disciplined hand position to aid balance.
- ▶ Reduce the size of the jump or the speed your student is taking off with.
- ▶ Focus on smooth extension of the legs at takeoff to project your student into a more balanced position in the air.
- ▶ Work on a strong controlled retraction of the legs up towards the body as the hands move down towards the snowboard.

Student leans back towards the tail while jumping:

- ▶ Reinforce a centred stance at takeoff and landing.
- ▶ Focus on smooth, active extension movements at takeoff to ensure your student is not passively absorbing the lip.
- ▶ Encourage your student to suck both knees up in the air.
- ▶ Reduce the size of the jump or the speed your student is taking off with.
- ▶ Use lots of mileage over a feature that your student feels confident on as it will allow them to practise good technique.

Student leans back over the heel edge in the air or when landing:

- ▶ Spend time with flat base tasks to ensure the student can takeoff with the board flat.
- ▶ Focus on keeping their COM directly over the board and ensure they are flexing evenly through ankles, knees and hips - during the approach, takeoff and when in the air.

Student lands sideways when shifty-ing:

- ▶ Get mileage using counter-rotation and develop this movement pattern to ensure that the upper and lower body can be separated.
- ▶ Ensure that the size of the feature is within your student's comfort zone.
- ▶ Ensure that students are showing confidence in a straight air before building basic air awareness.

## INTRO TO BOXES & RAILS



### WHAT, WHY, HOW

An introduction to box/rail riding comfortably.

To learn to ride on boxes/rails in balance and build confidence on the features.

50-50s:

- ▶ On flat ground, practise hops and focus on landing on a flat base.
- ▶ Do some straight runs (with both feet strapped in) on green terrain to practise the approach and trick zone. Practise hopping and landing in a flexed position in the straight run to practise the sensations associated with landing from the feature.
- ▶ Plastic poles/bamboo and other props can be laid down in the snow for the rider to slide over or a box can be drawn in the snow. This is used to work on lining up the snowboard with the feature and riding straight over it. This can be used to practise all zones of ATTL in succession.
- ▶ Take these new skills to an easy box feature in the park, ideally a ground level, short, wide and flat feature. Ensure to describe what to expect within each zone of ATTL. Watch others to help judge speed (including a demo), sideslip to a suitable drop in point, call your drop and commit.
- ▶ When comfortable, explore other entry level features to develop versatility or even begin to explore movements to develop the ability to move during the trick zone.



### Exploring movement and building confidence:

- ▶ During a 50-50, begin by reaching down and touching the knees, boots or even the feet depending on how confident you feel.
- ▶ During a 50-50, flex down with the ankles, knees and hips for stability and reach the front hand over the nose, or grab the nose of the board if you can reach it. Try the same towards the tail, ensuring to look in the direction of travel. This challenges moving nose and tail.

### Exploring boardslides and presses:

- ▶ Choose which trick appeals to the students and on flat ground review the use of counter-rotation (as with speed checks) or fore-aft movement of the hips from nose to tail to press (as with nose rolls).
- ▶ Outside of the park, try speed checks with the board as flat as possible and/or presses in the fall line.
- ▶ In the park, approach the same feature used for the 50-50, in the same way as the 50-50 and ride on to the feature.
- ▶ To explore a boardslide, during the trick zone, make a quick and smooth counter-rotation movement over a flat board (similar to the heelside speed check) to create the beginnings of a backside boardslide. Release the counter-rotation movement as quickly as you created it to return to an aligned position to exit the feature and ride away straight.
- ▶ To explore a press, during the trick zone, move the hips smoothly along and down towards the nose or tail of the board whilst looking in the direction of travel. As the other end lifts, a brief nose/tail press has been created. Move the hips back to the middle of the board, returning to even pressure over both feet to exit the feature and ride away.





## TECHNICAL DESCRIPTION

### VERTICAL

The focus here is on soft ankles, knees and hips to lower the COM. This will also help the rider transition onto the feature smoothly and absorb any drop at the end of the feature.

### ROTATIONAL

Rotational movements should be avoided in 50-50s and presses; however, it is more important that the rider remains aligned with their snowboard rather than the feature. When exploring boardslides, focus on smooth counter-rotation to maintain stability on the feature.

### LONGITUDINAL

The rider should focus on a centred stance initially. “50-50” is a reference to the rider’s even weight distribution during this trick. When exploring presses, focus on keeping the shoulders as level as possible to the feature as the hips move down towards the tail to promote stability and balance during the press.

### LATERAL

Maintaining a flat base is critical. Lateral movements should be avoided.



## TERRAIN & CLASS HANDLING

Start on flat ground, then use a green or easy blue run. When looking for a box make sure it is low, wide and short. This is often the first box in the park. With a larger group, make sure that they are grouped together and not blocking the park entrance or run into the feature. Once you have provided a demo, hustle back uphill to stand next to the feature for their first attempts. It's possible that you cannot see your students approach the feature from downhill and you can help students judge speed and when to drop with verbal cues.





## SELF REFLECTION

"Are my students riding at a suitable speed to coast off the end of the feature into the landing in a 50-50 before exploring movements in the trick zone?"

"Is my student making unnecessary turns in their approach causing instability and a poor line?"



## ENVIRONMENTAL TEACHING EXAMPLE:

If appropriate for your group, spend time next to the feature watching others ride over it. Your students can also take their boards off, hold them by the bindings and slide them back and forth on the feature to familiarise themselves with the sound and how the feature is sliding (fast or sticky).



## DETECT & CORRECT

Student drifts off the side before reaching the end of the feature:

- ▶ Reinforce body alignment with the snowboard and the feature.
- ▶ Encourage your student to avoid last minute speed checks during their approach so they can line up with the feature.
- ▶ Encourage them to stay balanced over the snowboard if it does drift to the left or right.
- ▶ As your student transitions through approach to takeoff, have them relocate their vision to the end of the feature.

Student slips out on their heel edge when attempting to pivot the board into a boardslide:

- ▶ Check that their approach is straight and their takeoff is flat base.
- ▶ Revisit 50-50s and focus on maintaining the feeling of a completely flat base and the soles of the feet remaining level.
- ▶ Ensure that your student is remaining laterally balanced over the centre of the board.

Student can't lift the nose or tail when attempting a small press:

- ▶ Spend more time outside of the park working on pressuring both ends of the board effectively.
- ▶ Encourage a blending of vertical and longitudinal movement, lowering the hips towards the nose or tail.
- ▶ Ensure that the shoulders remain parallel with the board.