

Snowboarding skills and thoughts for Ford Sayre, Dartmouth PE, and Skiway

For the beginning snowboarder (any snowboarder, for that matter), there are some essential skills and concepts that are very helpful. These can be broken down to the following areas:

- Familiarity with the board and the hill
- Basic movements
- Basic skills on the board

Before any of the following, check to see that the boots are tied properly. Often little ones do not have the knowledge or strength to tie their boots tight enough. Boots should be snug, so that the heel does not lift, but not so tight as to cut off circulation. A couple of tricks that the kids AND parents should know...

- Tighten from the toe back
- Use a finger to hold a lace while moving to the next eyelet
- Cross lace for a "pulley" with the hooks...
- Cross lace at top and wrap lace around boot (if they are long enough)

If the boot is not snug, it is difficult to work the board...

Familiarity with the Board and the Hill

In talking about the board with your students, it is critical that they understand the parts of the board and bindings. It is best to use language that is common for the whole group of instructors.

Board parts are:

- Deck (top)
- Base (bottom)
- Nose
- Tail
 - Just like a pet! Cat, dog, hamster, maybe not so much if they have a spider...
- Side
 - Side cut
 - Toe edge
 - Heel edge
 - Avoid the use of right and left
- Binding
 - Lead foot
 - Trailing foot
 - Again, avoid the use of right and left
 - Base plate
 - High back
 - Toe strap
 - Bone out or ankle strap
 - Buckle
 - Leash (they must have one in order to ride the lift... !)

- What is a turn?
 - When the board is rolled off one edge, one end of the board (nose or tail) passes through the fall line, and the board is put on the opposite edge
- What makes a board turn?
 - The rider!
 - Using the features of the board
 - Side cut (i.e. edging)
 - Twist (twisting the board with independent foot action)
 - Pressure (shift of weight toward nose or toward tail)
 - Rotation (rotating the board on the snow)
 - More details to follow below...

The Hill:

- Trail (the defined area where riders ride (at the Skiway, defined by lack of trees and where it is groomed)
- Fall line or down hill (where a ball would roll)
 - Varies depending on where you are. At the Skiway, it is rarely straight down the trail
- Traverse, or across the hill
- Riders right and left (when a rider is facing down the trail or down the fall line) – the only time that right and left are used... (well, almost...)

Basic movements

Our goal is to get students to use the sidecut of the board with as little effort as possible. Initial movements on a snowboard in this progression are static, that is, the body is held in a neutral, relaxed position, with feet, hips, and shoulders all lined up, and changes in board direction are achieved by subtle changes in edging, with minimal upper body motion or twisting of the body. With intermediate riding, the turns get more dynamic, involving shoulder rotation, extension and flexing of the knees, active work of the trailing foot.

To the casual observer, a static turn looks magic. The rider appears to do very little. It can be achieved with just minor movements of the feet... On the other end of the spectrum is a very, very dynamic turn, the jump turn.

Basic movements on the flats (without the board)

These basic movements are critical to getting the most out of the board (working the board). Have your group form a semi-circle so they can all see your face. Space them so that they can do the activities without hitting each other.

- Basic stance
 - Balanced between feet
 - Balanced between toe and heel
 - Knees bent!!!
 - Torso upright
 - Head up
 - Arms relaxed
 - Look both ways without moving shoulders (avoid using left and right – instructor can point, or have them look at their neighbor...)

Exercises: dropping and raising hips
jumping and landing flat footed

- Edging (remind students that this is how they will be using the sidecut)
 - In basic stance, roll onto toes **by lifting your heels**
 - Keep knees bent (usually not a problem on toes)
 - Keep torso up
 - Keep head up

- You tend to go where you look, if you look down, you will go down...
- In basic stance, roll onto heels **by lifting your toes**
 - Keep knees bent (like starting to sit in a chair) and lift toes (rear end will have to be pushed out to keep knees bent)
 - Keep torso up
 - Keep head up

Basic skills on the board

Since it is often difficult for new riders to think about anything while the board is sliding, it is best to practice some basic skills where there is no risk of sliding, i.e., on a flat area

On the flats

- Putting on the bindings (seems simple, yet many beginners have never done it...)
- Removing the bindings
- Edging

This is the first exercise where a lead foot is used (see appendix for lead foot determination at this point, use the board as it is set up)

- Buckle lead foot in, leave trailing foot out
- Stand on board with trailing foot on board – look for ready, or home position, knees bent, upper body relaxed and upright
- Step off toe edge (keeping knees bent) and lift heel of lead foot to roll the board onto the toe edge
 - A little (1)
 - More (2)
 - A lot (3)
- Now edge with both feet on the board (still only lead foot strapped in) – they can step off when they feel off balance
- Step off heel edge, bend at hips as if starting to sit down, keeping knees bent and put the board on edge by lifting the toes of the lead foot (doing this while keeping the lead knee bent is sometimes difficult) to the 3 levels
- Edge with both feet on the board (still only lead foot strapped in)

Exercise: Tap dance to get students used to edging, balance, toe/heel edging and weight shift

Instructor and students start with board flat, only the lead foot on the board, then the instructor shifts to an edge at level 1, 2, or 3, and says the level. Next the instructor taps the board and moves to the other edge and says the level of edging.

Remember, the edge is engaged by lifting the heel (toe edge) or toes (heel edge).

Vary the level of edging, vary the tapping up to 3 taps, including standing, do not always go from one edge to the other (i.e. stand, toe 2, tap, tap, stand, toe 1).

Or, Simon Says...

- Skating on the flat (moving around with only one foot buckled in...)
 - Buckle lead foot in (if not already in).
 - Stand on trailing foot on the heel side, with the toes at the lead heel, edge the board by lifting the lead toes
 - Stand on trailing foot on the toe side with the heel at the lead toe, edge the board by lifting the lead heel
 - Push with trailing foot
 - Place trailing foot near or in front of lead binding
 - Push board toward the nose without the trailing foot passing the trailing binding
 - With trailing foot on toe edge, on heel edge
 - With board flat and on edge
 - Have then do this in a figure 8, with the trailing foot on the toe side of the board AND on the heel side

On the hill

Now that the new riders have some basic ability to stand on the board and engage the heel and toe edges, they can try these skills on a moving board, but just moving a little...

- Skating up the hill (just a little) and glide with speed control, self stop by stepping off with trailing foot
 - Skate just far enough uphill that students will get a slight glide
 - Rotate board so the nose points down the fall line with trailing foot at the lead heel (i.e. off the heel edge)
 - Step onto board and glide a short distance (short as in a foot or so...)
 - Step off board to stop (students usually step off toe side)
 - If there is enough hill left, they can point the board down the hill, step on, glide, and step off again
- Skating up the hill (still just a little) and heel J turn (lead foot buckled in)
 - Skate just far enough up hill that students will get a slight glide
 - Rotate board so the nose points down the fall line with trailing foot at the lead heel (i.e. off the heel edge)
 - Step onto board and glide a short distance
(If they feel like they are going to go to fast, they can step off)
 - Roll board onto heel edge by “sitting” and lifting the toes
 - Let edge turn the board
 - Hold the board on edge to stop
 - If the board skids out, they have just learned to stop!
 - Repeat
- Skating up the hill (still just a little) and toe J turn
 - Skate just far enough up hill that students will get a slight glide
 - Rotate board so the nose points down the fall line with trailing foot at the lead heel (i.e. off the heel edge)
 - Step onto board and glide a short distance
(If they feel like they are going to go to fast, they can step off)
 - Roll board onto toe edge by bending lifting the heel of the lead foot and bending the knees
 - Let edge turn the board
 - Hold edge to stop
 - Repeat
- Skating up the hill (a little farther) and traverse (lead foot buckled in)
 - Skate far enough up the side of the hill that students will be able to traverse
 - Rotate board so the nose points across the hill (regular will have toes uphill) and trailing foot uphill of the lead foot (i.e. up hill of the board)
 - Put board on toe edge and lift trailing foot – see if students can balance for a few seconds
NOTE: board should always be on the uphill edge when across the hill
 - Put board edge and step onto the board keeping it on edge (both feet on the board) – see if they can balance, be sure that when they step off they step up hill, and especially on the heel edge, they keep their knees bent and hips low
 - Point board slightly down from traverse
 - Step onto board while keeping it slightly on edge and both knees bent (remember “sitting” for those on heel edge) board should follow traverse or turn up hill and stop
look for even weight distribution, perhaps slightly toward lead foot
look for upright torso and head up, looking in direction of traverse
(If they feel like they are going to go to fast, they can step off)
 - Slight dropping of lead heel/toe will allow board to fall off traverse, lift heel/toe to direct board back across (**keep board on uphill edge, just varying amount**)
 - At other side of hill, step off, rotate around trailing foot to point nose across the hill
(riders will switch edge)
 - Lift trailing foot and balance
 - Point board slightly down from traverse
 - Etc...

- Edging with both feet strapped in on the flats
 - With both feet strapped in, bend knees forward, lift heels to put on toe edge
look for an upright torso, arms used for balance, head up
(students may now find that balance with both feet strapped in is not easy when the board is not moving...!)
 - Drop heels so the board is flat
 - “Sit” and lift toes to put the board on the heel edge
look for an upright torso, arms used for balance, head up
(students may **really** have trouble with balance!)

NOTE: this is the one exercise that may be more successful with helpers providing a hand for balance

- Strapping in on hill
 - Skate or walk up the hill
 - If walking, when you get to the starting place, look uphill, place board across the hill, up hill of yourself, with toe edge up hill (if board slides, it will be a lot easier to catch...)
 - Place trailing foot with toe just barely on the deck, just tail side of the lead binding
 - Step lead foot into binding
 - Fasten bone out strap (can now shift trailing foot for better balance)
 - Fasten toe strap
 - Rotate around trailing foot so that board is across the hill with heel edge up hill and sit on hill (facing down hill)
 - Put trailing foot in trailing binding and fasten straps
- Rolling over (switching edge before riding) - many riders find that standing up on toe edge is a **lot** easier

From heel edge (sitting) to toe edge (kneeling)

- See if folks can lift the board
 - From sitting position, drop torso onto snow and lift board off the snow
(if stomach muscles are not strong, grab behind knees and lift board with your arms)
 - Sit up
- Drop torso, lift nose or tail (with or without grab behind knee) and roll over
(if not strong enough let gravity help... First rotate so that tail of board is downhill, lift lead leg and roll down hill over the tail – trailing binding is usually closer to tail than lead binding to nose)
- Make sure that board is across the hill (see standing up, below)

From toe edge (kneeling) to heel edge (sitting)

- Push yourself up onto knees
- Rotate so that tail of board is down hill
- Drop torso onto snow
- Lift board by bending knees
- Roll down hill
- Make sure that board is across the hill and sit up(see standing up, below)

- Standing up
 - If facing down hill, drop rear end as close to the board as possible
 - Place lead hand next to rear end
 - Grab the toe edge of the board with your trailing hand, in between the bindings (for stiff riders, trailing hand may be held directly down hill)
 - Push up off the snow with the lead hand, while keeping board on edge!
some can just stand up – others may need to slowly “bounce” the lead hand close to the board
don’t let students get frustrated, help them up if they are struggling
 - Sit down
 - Repeat!

 - Roll over to toe edge
 - Push up onto your knees
 - Place hands just up hill from knees
 - Lift your knees off the snow with weight on hands
 - When balanced, keep knees bent, and lift torso
again, look for upright torso, looking up the fall line, relaxed arms used for balance
 - Drop back to knees
 - Repeat!

At this point, most riders are ready for the J bar. **DO NOT push them if they are not interested.** All of the skills can be practiced with hiking up the hill

Riding the J bar

The keys to riding the J bar are:

- Trailing foot is unbuckled from binding
- Keep feet, hips, shoulders lined up with the board (do not twist body, just twist neck)
- Knees bent
- Step trailing foot off for balance as needed
- Let J bar push you up the hill with pressure against hip
- Lead hand goes high on bar (left for regular riders, right for goofy)
- Trailing hand keeps the bar from sliding up into arm pit

Demonstration

- On the flats, have a student point their board so the nose is pointing up hill
- Have them step their trailing foot on the board, check for bent knees, even balance between feet, with feet, hips, and shoulders lined up with the board
- Place your hand just downhill from their trailing hip (2 inches away, or so)
- Ask them to lean their hip against your hand
- Ask them to hold that position as you push them up the hill a few feet

Basic skills on the board on beginner trails (J bar)

- Traverse with both feet strapped in
 - After strapping, be sure the board is across the hill
 - Stand up
Generally easiest to stand on toe edge
Shoulders lined up with board, no twisting of the torso, knees bent

- Drop leading toe/heel slightly, to allow the nose of the board to drop toward the fall line – trailing toe/heel maintains edge, using board **twist** to change direction slightly)
look for balance between feet nose to tail, shoulders in same direction as feet, head rotated on neck, not torso rotation
- Raise leading toe/heel to allow edge to engage and maintain traverse
- Ride board in traverse, with minor adjustments to maintain traverse again, look for nose to tail balance and rotation of head, not torso, bent knees
- At side of hill, stop, drop to knees or sit down, and roll over
- Stand up
- Drop leading heel/toe slightly to allow the nose of the board to drop toward the fall line a little and then lift heel/toe to hold traverse
looking for balance, right? And shoulders lined up with board, right?
- Ride board in traverse, with minor adjustments to maintain traverse
- Traverse and garland strapped in
This exercise is similar to the previous, with more pronounced change in edging, to form a garland-like path in the snow – the goal is to get the board into the fall line and then turn back across the hill to a stop. This will start with a slight garland, or even a constant traverse. As students get more comfortable, encourage them to let the board rotate a bit farther into the fall line before they lift the leading toe/heel and ride across the hill to slow down (or even stop).
Look for nose to tail balance and proper torso/head position (i.e., no rotation)
- Basic turn strapped in on a slight incline (one turn to a stop)
 - Start as with traverse, shoulders lined up with board, knees bent
 - Drop lead heel/toe to allow board to drop into the fall line
 - As board approaches fall line, flatten lead foot, drop trailing heel/toe to flatten board
 - Roll the board onto the heel/toe edge (by lifting toes or heels) and ride the edge into a traverse to a stop
 - Sit/kneel
 - Traverse on the edge you just finished on
 - Drop lead toe/heel to allow board to fall into fall line
 - As board approaches fall line, flatten lead foot, drop trailing toe/heel to flatten board
 - Roll the board onto the toe/heel edge and ride the edge into a traverse to a stop
- Linked turns strapped in
 - Similar to basic turn
 - Ride edge to reduce speed before dropping lead edge to initiate turn to other edge
- Falling leaf (directional skid back and forth on one edge)
This is a nice way to practice subtle edge changes. This skill should be taught prior to taking students up the chair lift, and can be used on terrain that is intimidating.
This should be done statically, that is, no body twisting, and weight should stay evenly distributed between feet.
 - Starts the same as garland and traverse
 - Drop lead heel/toe to let nose of board drop toward the fall line
 - Lift lead heel/toe and ride the board across until it nearly stops
 - Drop **trailing** heel/toe to let the tail of the board drop toward the fall line
 - Lift “trailing” (it is actually now leading, as the board is going nose first...) heel toe and ride the board across until it nearly stops
 - Switch edges (kneel or sit down, roll over, stand up)

At this point, most riders are ready for the Winslow chair. This will allow for a longer sequence of linked turns, riding the edge to control speed between turns. Steeper areas are a great place for the falling leaf, on both edges.

Intermediate skills

As riders get more comfortable, slowly introduce some more dynamic elements of the turn. These are things that a rider can do **in combination with edging** to turn the board. That is, dynamic turns involve rotating the board and **then** edging. Dynamic elements of the turn include:

- Pressure/weight variation from ready position (both feet evenly weighted) to weight over lead foot as lead heel/toe drops, then back to the middle as turn is completed
- Torso and shoulder rotation – as lead heel/toe is dropping, turn lead shoulder down the hill into the turn, then keep shoulders in line with board as turn is completed
- Leg flex and extension – in traverse, knees should be bent (flexed) – as the lead heel/toe drops, stand up a little (i.e., extend, but keep knees bent a little), then drop back down (i.e., flex / bend knees more) as turn is completed

Introduce these skills either on a flat area where the boards will not slide. If this is not feasible, practice the new skill without the board.

Also, **practice basic skills** (you want them to be able to vary their riding by choice, not just by habit)

- Traverse/garlands with pressure variation
 - Starts same as normal traverse with shoulders lined up with board, knees bent
 - As heel/toe of lead foot drops, shift weight over the lead foot (board will rotate toward fall line quicker)
 - Lift lead heel/toe and shift weight to a neutral position (even between both feet) and ride board to a stop
 - Drop lead heel/toe, etc...
 - Repeat on other edge
- Linked turn with pressure variation
 - Starts the same as the basic turn
 - As heel/toe of lead foot drops, shift weight over the lead foot
 - Maintain weight over the lead foot as board heads to the fall line
 - Drop the trailing heel/toe as board heads into the fall line
 - Lift toes/heels (both feet) and shift weight to neutral as board turns across the hill and ride the board to control speed
 - Drop the lead toe/heel, shift weight over the lead foot to initiate the next turn
 - Etc.
- Traverse/garland with rotation
 - Starts the same as a normal traverse with shoulders lined up with the board, knees bent
 - As heel/toe of lead foot drops, rotate lead shoulder down the hill (board will rotate toward fall line quicker than basic turn)
 - Lift heel/toe, as board rotates, rotate lead shoulder to line up with board (across the hill) and ride across the hill to a stop
 - Drop lead heel/toe, etc...
 - Repeat on other edge
- Linked turn with rotation
 - Starts the same as the basic turn, shoulders lined up with board, knees bent
 - As heel/toe of lead foot drops, shift weight over the lead foot
 - Maintain weight over the lead foot as board heads to the fall line
 - Drop the trailing heel/toe as board heads into the fall line
 - Lift toes (both feet) and shift weight to neutral as board turns across the hill and ride the board to control speed
 - Drop the lead toe/heel, shift weight over the lead foot to initiate the next turn
 - Etc.
- Traverse/garlands with flex and extension
 - Starts the same as a normal traverse with shoulders lined up with the board, knees bent
 - As heel/toe of lead foot drops, extend legs (without completely straightening legs)
 - Lift heel/toe, and flex knees and ride the board across the hill to a stop

- Drop lead heel/toe, etc...
- Repeat on other edge
- Linked turn with flex and extension
 - Starts the same as the basic turn, shoulders lined up with board, knees bent
 - As heel/toe of lead foot drops, extend legs (without completely straightening)
 - Drop the trailing heel/toe as board heads into the fall line
 - Lift toes (both feet) and flex knees and hold the ready position as board turns across the hill and ride the board to control speed
 - Drop the lead toe/heel, extend legs (not completely...)
 - Etc.

Advanced skills

As the riders gain experience and get more comfortable, they can work toward fuller control of where they want to go and how fast.

- Linked turns with varied radii by combining skills
 - Turn using pressure variation and rotation
 - Turn using pressure variation and flex/extension
 - Turn using rotation and flex/extension
- Fully-dynamic turns (uses edging, pressure shift, rotation, and leg extension and flex)
- Fully-dynamic turns with varied radii
- All mountain riding (i.e., vary terrain)
- Carving linked turns with varied radius

Appendix A - Additional thoughts and stuff...

Determining lead foot...

For the basic skills, skating, edging, traverse, etc., determining the lead foot is not so critical. For new riders, a good stance to start with is a stance with the bindings rotated 9 degrees toward the nearest end. That is, the lead binding rotated 9 degrees toward the nose, the trailing binding 9 degrees toward the tail. Here are some ways to get an idea of which foot ought to be the lead foot.

- Run and slide in the snow
 - Have your students run and slide in the snow. They may not actually slide; however, look to see which foot they try to slide on.
- Run and jump as high as they can off one foot
 - Typically, people jump off their stronger leg, which should be the lead...
- Short glide (very short!) standing on a board

balance and to determine which foot is the lead foot (lead rhymes with deed, as in which foot leads down the hill, not rhyming which bed, which would be the heaviest!)

 - Walk up a very slight incline with board, place board on the snow, with the nose pointing down the fall line, stand on board with the left foot as the lead, just behind bindings, glide
 - Lead foot steps on first, be sure board not already sliding away from lead foot, then step on with trailing foot
 - Repeat with other foot as the lead foot - look to see weight distribution – often, with the weaker leg as the lead, student will lean into the hill. Also, ask to see which feels most comfortable to rider

If this is not obvious, see how board is set up. At this point, it is not critical that the student has a lead foot.

If a lead foot is obvious, there are two riding stances adopted from surfing and skateboarding:

Regular – lead with the left foot (more common)

Goofy – lead with the right foot (less common, so “goofy”)

Optional basic skills - Turning with only lead foot strapped in

- (optional – for students who might be learning a little quicker than the rest) Skating up the hill with traverse and garland with one foot strapped in

This exercise is similar to the previous, with more pronounced change in edging, to form a garland-like path in the snow (think popcorn garland strung on a tree, or a decorative garland in a wide doorway)

Across hill, stop, then rotate board around trailing foot.

Again, step off board if they feel as if they might go too fast...
- (optional – again for quicker students) Basic turn with one foot strapped in
 - Skating up the hill (far enough to traverse, but not so far as to gain too much speed)
 - Traverse
 - Drop heel/toe so that board falls into the fall line
 - Board should be flat when in fall line
 - Roll board onto edge by lifting heel/toe, hold edge and ride edge to a stop
 - **Both edges**
- (optional) Basic linked turns with one foot strapped in
 - Skating up the hill (far enough to traverse, turn, traverse again, and turn)
 - Traverse
 - Drop heel/toe so that board falls into the fall line
 - Board should be flat when in fall line
 - Roll board onto edge by lifting toe/heel, hold edge to control speed
 - When comfortable drop toe/heel so that board falls into fall line again
 - Roll board onto edge by lifting heel/toe, hold edge to stop
 - **Repeat starting on the other edge**

Skills progression

Basic skills off the board

- Familiarity with the Board and the Hill
- Basic stance (off board)
- Edging (off board)
- Putting on the bindings (seems simple, yet many beginners have never done it...)
- Removing the bindings
- Edging

Basic skills w/ lead foot strapped in

- Skating on the flat (moving around with only one foot buckled in...)
- Skating up the hill (just a little) and glide with speed control, self stop
- Skating up the hill (still just a little) and heel J turn (lead foot buckled in)
- Skating up the hill (still just a little) and toe J turn
- Skating up the hill (a little farther) and traverse (lead foot buckled in)

Basic skills w/ both feet strapped in

- Strapping both feet in on the flats
- Edging with both feet strapped in on the flats
- Strapping in on hill
- Rolling over (switching edge before riding) - many riders find that standing up on toe edge is a **lot** easier
- Standing up
- Traverse/garland

Riding the J bar and beyond

- Traverse with both feet strapped in
- Traverse and garland strapped in
- Basic turn strapped in on a slight incline (one turn to a stop)
- Linked turns strapped in
- Falling leaf (directional skid back and forth on one edge)

Riding the chair lift and beyond (AKA Intermediate and advanced skills)

- Traverse/garlands with pressure variation
- Linked turn with pressure variation
- Traverse/garland with rotation
- Linked turn with rotation
- Traverse/garland with flex/extension
- Linked turn with flex/extension
- Linked turns with varied radii
- Fully-dynamic turns (uses edging, pressure shift, rotation, and leg extension and flex)
- Fully-dynamic turns with varied radii
- All mountain riding
- Carving linked turns with varied radius

Etc...