

Random list of skiing exercises- Dave Jacobson February 2, 2021

- Snow circle- to show the feel of foot rotation
- Fore/Aft- pull forward on ski pole and then push back to find center of mass comfort
- Small wedge gliders
- Small wedge gliders to stop
- Uphill arc- use boot rotation
- Wedge turn- boot rotation only
- Wedge turn- touch knee or touch boot (if boot rotation alone does not work)
- Wedge Push Out- Another means of getting pressure on outside ski in wedge turn
- Wedge Foot Feeling- Pinky toe to flatten non-turning ski. Also can be big toe lift to close ankle
- Wedge Long Ski/Short Ski- the result of reducing pressure on non-turning ski
- Review of ski shape and the benefits on snow. Arc, ease of turning, built in turns
- Pressure Ski when off to show how pressure activates the arc of the ski
- Discuss skiing forward. Balance point of ski is the binding toe piece.
- Simple traverse with downhill ski flattened, uphill ski tracks on uphill edge, doe as garlands
- Tap taps, show how shoulders and forward pressure are needed to lift uphill ski
- Picture frame- hold poles as a frame and focus on fixed point to keep shoulders stable
- Wedge turns with Picture Frame. Slow simple wedge turns done independent of upper body
- Wedge Swoosh Christie- Traverse in wedge and swoosh uphill ski to match downhill ski to stop
- Wedge Swoosh Christies, do in garland across hill. Requires pressure on downhill ski.
- Traverse with hops, requires body being forward to not fall back
- Kids Popcorn game...have them ski and say popcorn, so they hop up
- Traverse with uphill ski tip pressured. Required forward lean with downhill leg straight at knee
- Traverse with uphill ski tip pressure, and then engage shovel to turn uphill in arch
- Ski tip pressure exercise repeated the more angle of uphill ski to touch back of downhill boot
- Pivot Slips- turn out uphill ski knee to initiate, pressure front of same ski to pivot
- Pivot Slips- down the fall line both directions. Give them tip on getting to back of skis
- One ski turns- traverse on uphill edge of uphill ski, tip shovel to begin arc, release uphill edge. This is done with the downhill ski tip pressure on the snow. Require creases to come out of pants behind uphill ski to pressure that ski on the front. (discuss with Joel the unweighting of back of uphill ski...good to do or not?)
- One Ski turns both directions on one ski- requires really leaning out to get over the ski when turning right on right ski or left on left ski.
- Garlands to teach parallel turns. (Joel-is is Ok to teach forward pressure to a release as skis flattened to float sideways, or is simply tipping of the edges?)
- The Perfect C Turn- Do the one ski exercise on uphill ski uphill edge, then use the front of ski to dig into the snow to begin the shaping of the turn, a perfect C turn will be created.
- Pole touches- traverse slope and add touch with downhill pole to time the initiation of turn. Do this by traversing hill and touching multiple times to get the time. (Joel, what is the timing of the pole touch, in your opinion.)
- Do Railroad tracks across the hill. This requires pressure to be managed so only the uphill edges creates a line in the snow.

- Doing the Railroad tracks requires forward pressure, that is modified as speed and the arch of the railroad track dictate. This takes time to discover, do it in both directions.
- Traverse position- Important! Explain ski position with uphill ski ahead, draw angle and explain that the boots, knees, hip, hands and shoulders are all at that angle. Slightly more pressure on downhill ski.
- Traverse to Uphill arch- (like J turns but with less speed across slope) Gradually begin going more down the fall line to create J shaped turns. This requires modifying the pressure as the skis move faster and the arch begins to form.
- Do the J Turns but with poles held across the slope to develop the stable upper body. Do this in both directions to make sure they are able to move the legs in the arch with upper body movements.
- Leaper turns- Use this to get students to use their knees and ankles as they ski. Start across the fall line, and have the compress and leap up to initiate the turn. This requires the body to be forward, land the leaper turn in new direction.
- Hockey Stop- Similar to pivot slips but with an increased edge set to stop both skis quickly once pivoted. Hands and body must be downhill to do this exercise.
- Wedge Christies- Cross the slope in traverse, flatten downhill ski, (think lifting big toe of downhill ski to help flatten. Can also think pressure on pinky toe or both to get the feel of the foot inside boot when flattening. It also can help to have them rotate downhill knee and ankle downhill.
- Start Wedge Christies directly across the slope, traverse can add pressure to arch uphill to slow prior to flattening downhill ski. Let them feel what happens when downhill ski flattens, have them explain what happened to the non-flattened ski. (it is immediately tip on edge without skier effort).
- Crab Walks- If they are having trouble with wedge christies, go back to narrow wedge, and face down the fall line. Have them flatten one ski which makes the opposite ski want to turn. Have them keep facing straight down the fall line without turning, instead gliding sideways down the fall line.
- One ski wedge turns- Getting on the downhill ski requires centering the body weight over that ski. This requires the shoulders to tip out at the waist, so the downhill ski stays on edge. Do one ski turns in both directions.
- Closing the ankle helps when doing the One-Ski Turns. Bending the new downhill ski knee and bending out at the waist will allow the new uphill ski to be lifted while turning. Do this in both directions.
- Converging skis to parallel- Start from traverse at 45 degrees. Slow the speed with small wedge. Position shoulders to outside of downhill ski to allow uphill ski to come into parallel position with downhill ski. Do as a garland, if the room is available. Release edges to allow swooshing of skis, then tip edges to end the exercise.
- Rail Road Tracks- Do on a very flat surface, at slow speeds. Start down the fall line. Tip both skis slightly on same edge for count of 4. Flatten for count of 2 and go to opposite edge for count of 4. This is meant to go slowly down the fall line without any additional rotation, just the arch of the ski in used. If successful, only two lines will be shown on the snow. To skidding whatsoever.

- Short Radius Turn Exercise- Can do wedges to parallel, wedge christies to parallel, or if skier is making nice medium radius turns, can simply speed up the action. Pivot slips can help. Allow skis to skid, it's ok in short radius. Work on pole touches. (Joel question on pole touch location and timing.)
- Slope Incline Education Exercise- Have students look across the slope and determine the angle of the slope. Have them try to tip their body downhill so that their shoulders are parallel to the angle of the slope.
- Do the above but have them put their ski poles together and place them across their back with the arms bending to hold the poles in place. This will help lock in the shoulders to stay parallel with the slope.
- Another way to position the body based on the steepness of the slope is to face across the slope, and then extend both arms out straight to the side. The planting the poles at the point of each outstretched arm. The while the poles are still planted. Step uphill toward the uphill until the shoulders are parallel to the slope. This can be done on any slope to provide a guide for how far the upper body needs to tip to best ski that slope effectively.
- Wedge Turn Olympics- Pick a location down the slope to be the finish line for this exercise. The objective is to face down the fall line in a wedge, and then going straight down the fall line making as many wedge turns as possible. Everyone counts the turns to compete for the most award.
- The above exercise works well when students are introduced to steeper terrain. The counting of the turns takes their minds off the steepness, and the pressured wedges slows their speed.
- The above exercise can be done on easy or intermediate terrain, but with additional added boot rotation to create a more finished shape to each turn. This exercise is not a competition, but rather a means of introducing students to the movement of upper body over pressured/turning ski. It can be effective when first beginning short radius turns.
- Floated parallel Turns- Start with garland across the slope, using pressure and edging to carve both skis into an uphill arch. Have them do this in both directions, as many times as possible based on the area of the slope available. Then have them do the traverse, the pressure to the front of the skis, and then release the pressure with a slight rising of the knees to flatten the skis. This flattening will make the front of the skis begin to slide downhill. Have them allow that sliding or Floating of the skis to continue until directly down the fall line. Then reengage the edge as done with the garland.
- Floated parallel turn- This is a great experience for skiers, a life changing experience for those looking to become advance skiers. Do the same as above, but when facing down the fall line, change both edges to create a turn in a new direction. We're not looking for turn shape, rather, we want them to feel how the floating occurs during the shaping phase. Eventually decreasing the float time based on radius of turn desired.
- The above is done with pole planting. Once the students have the feel of the floating of the skis and the reconnecting with the edges, and can link multiple turns, poles touching can be introduced.
- Falling Leaf- This exercise teaches edge control, pressure control, balance, foot sensitivity and more. Cross the slope in a traverse and pressure front of skis and increase edge angle to form an arch up the hill. Then when stopped, allow the skis to glide backwards at an angle across the slope. Next when nearly stopped, flatten the front of the skis to slide sideways to a new

traverse. Do the same as the initial step and repeat backwards movement. The markings in the snow resemble the path of a leaf as it falls from a tree. Do this exercise in both directions.

- Flatwork should include the Core Concepts: Fore/aft to discover the center position on skis; edging demonstration to explain wedge, side steps, etc.; rotation using circle on the ground and also doing one ski glide in a circle. Limit odd or difficult movement like jumping up in the air. Successes are needed at boot work, not defeats.
- Glider Hill- Before attempting to side slip up a slope, find any little knoll and slight downward slope to allow them to feel the straight run, wedge, braking wedge, and initial turn using boot rotation. Doing this where a flat runout is available takes away the fear of the slope.
- Tumble into a turn- This is an advance exercise that helps move the body into the turn. Traverse a more difficult slope. Have them look into the direction that they will be going after turning. The movement is to look, reach in that direction with the poles, flatten skis and fall into the turn. This exercise should strive to get the weight forward on the downhill ski, but with forward lean and not knee bend to create the forward pressure.
- Do the same exercise for tumbling into the turn, but have student use the tip of the uphill ski to help create the turn. Go back through previous one ski exercises to get the feel for the shovel of the ski creating this arch.
- Outrigger turns- This is a great exercise to help keep the body from rising up during making medium radius turns. Hold the poles out from the body with the palms of both hands facing upwards. The poles should stay in continuous contact with the snow throughout this exercise. Having the arms and shoulders down requires the legs to make the turns without any upward motion. Important- to avoid injure at the bottom of the slope, have student raise both arm in the air before making the final turn to stop.
- Dynamic Arm Swing- Advance skiers should be taught to ski dynamically by carving their turns with little to no slipping or swooshing of the turn. Have the students picture a GS racer making turns on a course. They are driving their knees forward, their upper body forward to match the bend of the knees, and their arm are always swinging forward in preparation for the next touch. The arm swing help power the dynamic turns by driving the arm and shoulder .
- Dynamic Turn Arm Swing Exercise- Traverse the slope at 45 degree angle an drive to knees to pressure edges to create carving motion. Start with arm back and drive the arm forward to touch position. Feel the power that comes from the arm and shoulders driving forward to help pressure the downhill carving ski. Do this in both directions until the time of the arm swing is in sync with the pressuring of the skis. Create uphill arcs to stop.
- Dynamic Turn Arm Swing to touch and turn- Do the above exercise, but now instead of ending with an uphill arch, plant and turn to create a carving of the skis and an arm swing in preparation of the next swing. Timing is critical and the arm swing must be in relationship to the size of the turn for proper timing. Large radius turns means a slower arm swing; medium radius turn will have a bit faster arm swing. If students are struggling with the timing of the arm swing, go back to the exercise of arching up the hill, really driving the knees, upper body and arm/shoulder to power the dynamic turns.
- Racer arm and hip drill- This drill works well when teaching dynamic turns with are swing. Have the students leave poles at top of run. Put one hand on hip and extend the other arm in the direction of the turn with palm facing down. The objective is to have the body moving in the direction of the turn, which extending the arm will facilitate. This exercise requires moving the

hands and arms with each turn. The pole swing action is the same as the action made as the straight arm pointing in the direction of the turn. After practicing this for a couple of runs, reintroduce the poles. The goal is to have the arm and shoulder helping the shape and finish the turn in a dynamic carving of the skis.

- Skiing the steeps- How and where to plant the pole when on a very steep slope. This exercise requires the student to once again see the angle of the slope as looking across the slope. Then putting their shoulders at that same angle so it matching the slope. Once this is done, it becomes apparent where the pole touch should be made. The steeper the slope, the more the body tip downhill, and the farther downhill the body, means the planting arm is also farther down the slope. Plant the pole downhill and ski thought the pole not around it.