**Skill Focus**: Edge Control (pg 15-16, PSIA Alpine Technical Manual, ATM)

Tipping the skis relative to the length or longitudinal axis of the skis. Skiers use this action to increase or decrease the ski-to-snow angle.

**Skiing Fundamental**: Control edge angles through a combination of inclination and angulation.

**Plane of Movement**: Frontal

This week’s skill focus is on the process of de-edging.

Movements we see to release the edge (in our students):

* Primarily an up motion or extension of the uphill leg (at turn finish) that pulls the edge of the downhill ski off the snow.
* The skiers center of mass is stuck to the inside of the (old turn) turn because the outside leg remains at length through the finish of the turn.
* The extension move, directly upward, does not help to release the edges.

How to release the edge:

* The skiers center of mass (COM) needs to move from the inside of the previous turn, over their equipment & in the direction of the new turn to promote a continuous release and engagement of the edges while the skis are moving in the same direction.
* The extension needs to be in a direction perpendicular to angle of the slope >
* The outside leg (old turn) needs to soften/flex as the pressure builds through the end of the turn
* COM will give in to the pull of gravity giving the sensation of “falling”
* Simultaneously, begin to extend your new outside leg > skis edges will be engaged in the snow, skis bending & keeping you in balance

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| **Ski Snow Interaction Observations** | **Body Movements**  **Pages 22-27**  **PSIA Alpine Technical Manual** | **Body Parts creating movements** |
| * Flat ski * Slide > forward, flat ski * Slip > “side slipping” travel in direction sideways to ski length * Skid > blends forward & sideways action of the skis * Carve > the action of an edged ski traveling forward along length of ski w/minimal to no sideways travel * Ski on edge > low, high * Similar/different edge angles * Track of skis > 1 flat, 1 edged, same * Progressive edge change or quick * Simultaneous * independent | Inclination  Angulation   * Hip Angulation * Knee Angulation | * Lateral movement of the body/body parts * Femur rotation * Femur abduction * Femur adduction * Torso flexion |

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| **Drills** | **Level** | **Outcome** | **Movements** |
| Foot Tipping  Stationary Boot work | Beginners | Promote the initiation of edge control movements at the feet | Tip feet from big toe to little toe.  Tall stance = minimal edging/de-edging  Flexed stance = greatest degree in edge control movements |
| Butterfly/Bowtie  Stationary boot/ski work | Beginners | Edge control > maintenance of a flat ski to facilitate rotary control movements | Rotate the femur within the hip socket.  Rotate femurs internally to create a wedge.  Rotate femurs externally until boots/skis are parallel |
| Sidestep (pg 108, PSIA ATM)   * Boot work * 1 or 2 skis | Beginners | Tipping the skis to grip the snow for climbing; develops balance on the edges of the feet & skis | Step sideways on flat terrain > focus on tipping feet/knees so that the uphill edge/inside (uphill ski) dig in & inside edge of downhill/outside ski dig in  Sidestep up & down a shallow/gentle slope. |
| Traverse | Beginners | Explore varying ranges of edge angles | While in traverse practice tipping skis on/off edge:   * Feet tipping * Knee tipping/angulation * Hip angulation |
| New Inside Leg Forward& Diagonal | Beginners to Advanced | Facilitate de-edging & edging of skis from turn finish to initiation  Draws center of mass in new direction of travel | At turn finish, begin to flex new inside leg forward & diagonal into boot cuff > moving from old edges > flat ski > new edges at turn initiation  Simultaneously new outside leg lengthens |
| Inside Leg Forward & Diagonal @ Apex > Finish | Beginners | Facilitate guiding of the inside ski to parallel through turn finish | Instructor pushes against the “side” of students lower leg (inside leg/shin); student flexes ankle & knee while simultaneously rotating femur externally (away from body) > driving lower leg forward & diagonally uphill allowing the inside ski flatten, guide to parallel & move to inside edge of inside ski |
| Railroad Tracks (pg 120, PSIA ATM) | Intermediate to Advanced | Facilitate smooth, progressive & simultaneous edge release & reengagement; minimize rotation | Movements should be initiating at feet, knees  Skier slightly tips both feet to make two clean & parallel tracks in the snow  Start in a straight run > stay close to fall line & tip skis from one set of edges to other > transfer weight toward outside ski to create edged arcs in the snow w/o skidding  Keep skis the same distance apart throughout |
| Side Slips (pg 113, PSIA ATM) | Beginners to Advanced | Edge control accuracy in edge angles and direction of slip  Review athletic stance  Directs balance on downhill ski | Skis perpendicular to fall line  Athletic stance  Lower/flexed stance facilitates a greater range of edge control through tipping of the feet & legs  Manage speed of slip with edge angle > low edge = faster slip; high edge = slow slip |
| Pivot Slips (pg 119, PSIA ATM) | Inter > Adv | A descending skier quickly pivots the skis to slip sideways while continuing to travel in the same direction as before Edge contral management: | Flatten/de-edge skis to facilitate rotational control of skis  Low/high edge to manage sideslipping speed  HOW to steps in PSIA ATM |

[Equal Angles at the Ankles, Snow Pro Tip, Kate Morrell](http://www.psia-nw.org/category/snow-pro-tips/page/7/)