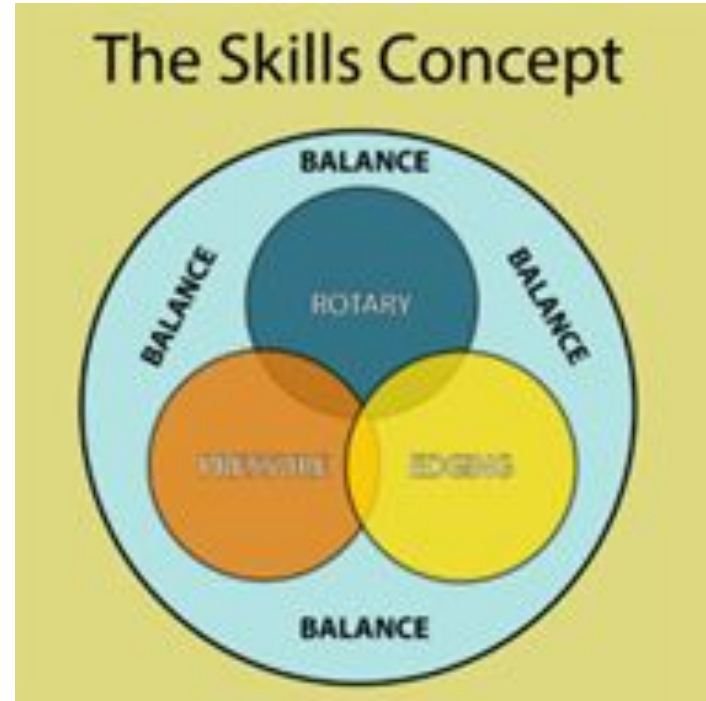


Introduction to skiing Prior to the Ski Slopes Section 2

PSIA Skills Concept based on the knowledge of three skills. *BALANCE*

1. Rotational control
2. Edge control
3. Pressure control





What is the Skills Concept

These three skills are integral to all turns and are essential for maintaining BALANCE.

Distinctions between the skills emphasize a connection between the action of the skis and the corresponding body movements for each skill. **BALANCE IS BOTH A SOURCE AND OUTCOME OF EFFECTIVE MOVEMENTS.**

These skills provide a clear framework to analyze the action of the skis on the snow and the skier's movements to accomplish these actions.

SKILLS AND MOVEMENTS IN SKIING

1. **SKILLS.** It refers to the ability to execute a task. Definable body movements to produce the desired action of the skis on the snow.
2. **MOVEMENTS.** It has to do with which body parts are supposed to move and how they're supposed to move in order to perform a task.

Use to identify movement blends. Specifically pertaining to tipping and turning the skis (edging and rotation, respectively), and pressure control (foot to foot and fore/aft through flexion and extension) – to teach students how to improve their skills.

All Levels



Maintain
balance
on skis



How to maintain Balance on the Skis

ANY GIVEN SKILL BLEND WILL BENEFIT FROM THE FOLLOWING COMMON ELEMENTS:

- 1. Eyes focus on middle of next turn.**
- 2. Functional tension in the torso/core allows the legs to turn and steer.**
- 3. Shoulders are forward of the hips, spine erect but flexed.**
- 4. Skier balances on the outside, supporting ski. Inside ski is grounded to use both skies for simple, smooth skiing.**
- 5. Inside leg activity increases as the skis move through the turn allowing adjustments in edging and fore/aft pressure destruction.**
- 6. Inside leg tips laterally to complement outside leg tipping.**
- 7. Edges released and engaged in one smooth movement to enhance parallel skiing skills.**



FIVE (5) ALPINE SKIING FUNDAMENTALS AS EMPHASIZED IN CURRENT NATIONAL STANDARD

1. Control the relationship of the Center of Mass to the Base of Support to direct pressure along the length of the skis.

Fundamentals of Skiing



When you understand the **skills concept** then you are able to identify the **FUNDAMENTALS** of skiing. These are the actions of skiing. It is what we are trying to do while skiing.

1. Control the relationship of the center of mass to the base of support to direct pressure along the length of the skis
2. Control pressure from ski to ski and direct pressure toward the outside ski
3. Control edge angles through a combination of inclination and angulation
4. Control the skis rotation (turning, pivoting, steering) with leg rotation, separate from the upper body
5. Regulate the magnitude of pressure created through ski/snow interaction

1. Keep the Center of Mass over the Base of Support / Skiers need to stand over the center of their feet

One of the toughest fundamentals to master is also the simplest. Good skiers must control their center of mass, so that it can stay over the base of support. In general, stay balanced so you can use the front of the skis and the back of the skis when needed. Many skiers are perpetually stuck in the “backseat.” Only when you have access to the entire length of the skis can you properly shape your turns. *Drill:* Dial in this type of balance by hopping or bouncing on your skis. If you can find balance over your feet, it will show by the ability to either bounce, or slightly hop and leave the snow at any point in your turn. When you do leave the snow, make sure the skis stay nice and level with the snow surface, to ensure solid balance over the middle of the skis. Challenge yourself by having a friend follow you and call out when they want you to hop or bounce. You should be able to execute the move at any point in the turn. **Flexing at the Ankles, Knees and hips is your production line for balancing success**

2. Direct Pressure to the Outside Ski / They need to be able to distribute their weight over the outside ski and then over the new outside ski as they make a turn / Balance on outside-downhill ski.

The fundamental key to skiing well is to get balanced over the downhill or outside ski. This is as simple as saying that turning left is a right-footed turn and turning right is a left-footed turn. While good skiing does involve help from the inside ski, which should stay engaged with the snow while it also tips and turns, the real money is on the outside ski. *Drill:* Learn to balance on that outside leg and ski by making some turns with the inside ski just barely off the ground, or touching just slightly, while all of your weight is on the outside ski. Make sure the inside ski stays level to the snow; don't let the tip get higher than the tail. When you can properly balance on only the outside ski through a series of turns, then you will be better balanced to ski on both skis.

3. Control Edge Angles with Inclination and Angulation / Skiers should use inclination and angulation to control edge angle

Skiing in Vermont is definitely about getting on edge, but how we put the skis on edge can make a huge difference. Tipping the skis on edge involves inclining the body towards the inside of the turn in the direction you are turning, and also involves regulating the upper body back towards the skis, towards the outside of the turn. Most skiers get the tipping into the turn part of edging their skis; they usually do this too much. It's the angulation of the upper body back towards the outside ski that gets overlooked. *Drill:* The best way to reinforce good angles is to take a run with your poles dragging in the snow. Keep them just a bit wider than your feet and in line with the front of your boots, and almost totally vertical. In order to keep both poles in the snow while turning, you will need to move the inside hip and shoulder up, and keep the outside hip and shoulder down. This will level out your upper body, to prevent tipping into the turn, and will help your edges work the best they can.

4. Control the Skis' Rotation with leg rotation / They need to turn their feet and legs more than they turn their upper body

Everyone loves to watch good bump skiers; it's amazing to see how well their legs can move and turn independently of their upper body. It's also fundamental to good skiing that the skis are turned with the rotation of the legs independently of the upper body. Many skiers who aren't well balanced over their skis don't have the ability to rotate the legs and turn the skis without turning the entire body. When you find a stance that is centered over your feet, it becomes possible to rotate the thighs, and turn the skis while keeping the upper body and even the hips down the hill in a short turn. *Drill:* Practice staying balanced over your feet, and turning the legs off to each side while continuing to move straight down the hill—your shoulders and upper body facing the fall line. This proper

5. Regulate the Pressure Created by the Ski/Snow Interaction / They need to have the ability to regulate pressure along the length of the ski

The true “*je ne sais quoi*” of great skiing is a skier’s ability to have “touch.” Good touch is what makes a skier look like they are floating down the hill with no effort. Once a skier is balanced front to back, and side to side on the skis, has proper angles, and is turning the legs, there is a chance to have good touch. Being able to leave the snow when you want, and being able to stay on the snow when you want are good examples of this. When a skier is balanced over the boots and skis, the legs can be supple, and relaxed, and can adjust for changes in the terrain. This is the opposite of a skier who is leaning back and bracing against their outside leg and holding on for dear life. That skier is going to be thrown into the air unintentionally by the next bump. The best drill for dialing in this fundamental is to ski lots of types of terrain. Go find powder, breakable crust, ice and anything else off the groomers. That will help build your touch!

1. **Control the relationship of the center of mass to the base of support to control pressure along the length of the ski. Stance.**

- a. Open stance, loose and adaptable. Not a pre-determined stance or distance.
- b. Shoulders forward of the hips.
- c. Ankles soft supple to allow intricate movements, balancing over the whole foot
- d. Upper and lower body independence
- e. Torso functional tension allowing the legs to turn, steer, push and pull forward back (fore/aft).
- f. Simple balance involves seeking shin contact with the boot tongues.
- g. Arm position can determine upper body position.
- h. Pole swings. 1. Help strengthen angles and complete the current turn. 2. Help release angles and direct movements into the new turn.
- I. Keep the Body's center of mass (CM) over the base of support (BOS). In simple English: Keep your stomach over your feet.
- j. OR, Keep the Body's center of mass (CM) relative to or approximately over its base of support (BOS) while moving. In simple English: Keep your stomach approximately over your feet while moving. (See Video Below to really confuse yourself)



2.

Control pressure from ski to ski and direct pressure to the outside ski.

- a. Balance is on the outside supporting ski. Inside ski grounded to support balance.
- b. Pressure redistribution – stepping to new outside supporting foot – subtle blend moving from outside foot, through both feet, to the new outside foot.
- c. Amount of pressure tactical choice given the terrain, speed, snow conditions and turn shape.
- d. Inside leg is highly active.



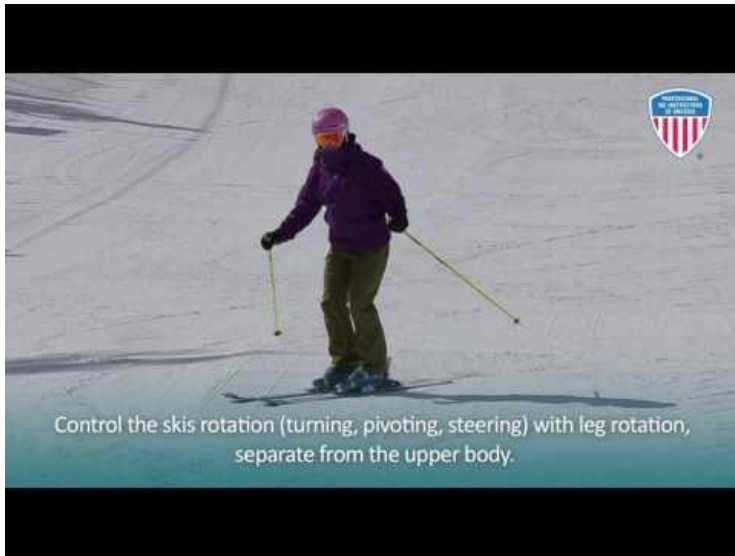
3. **Control edge angles through a combination of INCLINATION and ANGULATION.**

- a. Edges released and engaged in one smooth movement. Hip and knee angulation to control the angle of the skis to the snow.
- b. Inside leg tips forward and laterally to facilitate outside leg tipping.
- c. Feel, Legs and Hips move forward and laterally to release and engage edges.
- d. Body inclines to accommodate forces of the turn increasing edge angle.
- e. Feet pronate (angle in) and supinate (angle out) create sensations of tipping the ski with the foot.



4. **CONTROL THE ROTATION OF THE FEET AND LEGS – TURNING, PIVOTING, STEERING WITH LEG ROTATION SEPARATE FROM THE UPPER BODY.** Legs rotate separately from the hips and upper body.

- a. Turning (rotating the legs in the hip socket).
- b. Legs turn more than the upper body (Upper body is stable).
- c. Legs and feet steer the skies.
- d. **Countering and anticipation angles are developed, rather than positioned.**
- e. *Inside half of body leads. Outside ski leads. Lead change results from turning the feet and not positioning the body.*



5. Regulate the magnitude of pressure through the ski snow interaction.

- a. Ankles, knees, hips and spine flex/extend to aid balance while in motion.
- b. **ACTIVE** flexing and extending (Skier induced) **PASSIVE** flexing and extending (terrain induced)
- c. Ankles flex/Extend distribute pressure fore and aft.
- d. Entire body involved in balancing.





Anticipation of the upper body



Uphill Ski Leads / Lead change



Steering the Ski

TACTICS AND TIMING OF MOVEMENTS TO THE TURN PHASE

1. **TURN INITIATION** – *Edge change of the outside support ski has occurred and the new outside ski begins to support the body for balance.*
 - a. *Skis begin pointing into the fall line.*
 - b. *Center of mass moves toward the inside of the turn – Crossover and/or Cross under.* Short turns cross under / long wide turns crossover.*
 - c. *Lead change alignment to pitch of the slope.*
 - d. *Weight redistribution smoothly toward the outside supporting foot.*

2. **SHAPING PHASE** – *Edges engage, turning the skier in the new direction.*
 - a. *Inclination / angulation angles are strongest.*
 - b. *Steering helps redirect the skies*
 - c. *Desired edge angle using the ski's side cut to aid direction change.*
 - d. *Shorter inside-leg and longer outside leg tactics for balancing with the force of the turn.*

3. **FINISH PHASE** – *Blends into the beginning of the transition. Skies stop turning pointing and moving out of the fall line.*

a. *Feet and legs begin releasing edges*

b. *Pole swing begins*

c. *Re-centering begins – torso and lower body naturally aligns. Legs turn to realign with the torso.*

d. *Weight distribution begins equalizing between the feet.*

4. **TRANSITION – LINKING PHASE BETWEEN TURNS.**

a. *Sensation may be a release from forces in the current turn.*

b. *Realignment of the center of mass. Feet crossing over the path of the feet and/or the feet crossing under to the other side of the body.*

c. *Skis feel light.*

d. *There is a slight turning movement of both legs to steer the skis.*



Pressure Control Movements

Fore/Aft Pressure Control

- a. **The Ankles:** When we flex just the ankle, pressure moves forward. In contrast, when we straighten just the ankle joint, pressure moves aft.
- b. **The Knees:** When we bend just the knee, pressure moves aft. When we straighten just the knee, pressure moves forward.
- c. **The Hips:** When we bend at the hip sockets, or hinge at the hips like we are bowing, pressure moves forward. When we extend at the hip sockets, like when we “stand up,” pressure moves aft.
- d. *Fore/Aft Pressure Control*
- e. *Foot/Foot Pressure Control*
- f. *Rotational control*
- g. *Edge Control*

Fore/Aft Pressure Control



Foot/Foot Pressure Control

Pressure Control Ski To Ski
Prescription for Change
Shaping Phase



Rotational control

Rotational Control
Prescription for Change
Shaping Phase



Edge Control



MOVEMENT ANALYSIS TOOL – LEARN ABOUT THE STUDENTS CAP PROFILE – COGNITIVE, AFFECTIVE AND PHYSICAL FACTORS.

- 1. Observation – How the skier moves provides clues to how the skis will perform on the snow.***
- 2. Evaluation – Typical body movement or position is the cause of ski performance and ski performance is the effect. Cause and effect can also relate to phases of a turn. An action in one phase can affect what happens in the other phase***
- 3. Prescription – Where the coaching comes in. Gain an understanding of the student's CAP profile. Coach them to understand what they need to do to become more effective and efficient with their turns.***



Determining Cause and Effect. Cause and effect relationship addresses the “why” in skiing.

Compare Real to Ideal Performance.



Skills may be blended with the right duration, Intensity, rate and timing (DIRT)

D.I.R.T – COMMONLY USED ACRONYM. Helps us compare and contrast movements and be more concise when analyzing body movements and ski performance



1. *Duration: Length of time a movement occurs*



2. Intensity: Amount of power given to a movement



3. Rate: Speed at which movement occurs



4. Timing: When a movement occurs



MOVEMENT ANALYSIS

The National Standards for PSIA regarding Movement Analysis have three common assessment activities when looking to assess competency for PSIA Certification Levels 1-3:

1. Observe: articulate (describe) accurate ski and body performances through at least one phase of the turn
2. Evaluate: articulate accurate cause and effect relationships using one or more skiing fundamental
3. Prescribe: create a pathway for improvement using one or more skiing fundamental

All 3 Cert levels use the following assessment criteria in graduated complexity:

1. Accurately describe performances using the 5 fundamentals
2. Link ski and body performances to describe cause and effect relationships
3. Evaluate performance (real) against a more ideal model
4. Prescribe a specific change to one or more fundamental using DIRT
5. Relate how equipment choice affects skiing outcome

When developing a process to meet the criteria, the Alpine Technical Manual sites all systems should have three elements in common: observation, evaluation, and prescription. The observer should consider the following:

Observe: what, when and how does it happen?

- Turn shape and size. Skis relationship (parallel, converging etc.), symmetry from one turn to the next, is speed consistent?
- Whole vs Part: do you focus on the skier's whole image? Or is the focus on a specific body part or specific phase of turn?
- What part(s) of the turn: initiation, shaping or finish
- Ski: Does it slip or grip, where is the spray? Do the skis move in a simultaneous way? What tracks are left on the snow?
- Body: Pressure fore or aft? Ski to ski pressure? How are joints flexed?
- DIRT: Where is the direction of the movements?

Evaluate: why is it happening?

- Cause and effect relationships; the body (cause) makes the ski do (effect)
- Focus on the cause
- Real vs Ideal: compare the skier's performance to the desired outcome
- Prioritize what change (fundamental) will have the greatest impact.

Prescribe: prescription for changing the students' performance.

- State an outcome using the fundamental focus prioritized in the evaluation phase
- Understand and describe how cause and effect links to stated outcome
- Create learning opportunities (progression, drill, or exercise) that are specific to stated outcome
- Understand the difference between instruction and feedback
- Give feedback that is clearly tied to the observation, evaluation and relevant to the stated outcome

DEFINITIONS:

The following descriptions and definitions will help with a common language for MA.

Ski Performance: includes the skis action, location (phase of the turn), relationship of the skis to each other and will include equipment variations

Body Performance: includes Rotational Control mechanics, Edge Control movements, Pressure Control movements, the location of said movements and the DIRT of the movements

Cause and Effect Relationships: “the body moves this way, and causes the ski to do this..” Evaluation of the cause or origin of an action, and its resulting effect or result. The observer must consider the intent of the skier, including his/her understanding. Equipment and mechanics are related factors.

Real vs Ideal: the instructor compares the students’ performance (real) to an optimal performance (ideal) for a given task, condition, intent, or mechanic.

DIRT: an acronym standing for Duration, Intensity, Rate and Timing. These are terms that attach value, and therefore description, to movements being observed.

Duration: Length of time the movement exists

Intensity: Power given to the movement. Amount, magnitude, or quantity.

Rate: The speed in which a movement occurs.

Timing: When the movement occurs. Could be in relation to another event.

Also, the direction of the movement relative to the slope should be considered.

Turn Size: short, medium, or long. Turn size is often defined by a corridor of a certain measurement. The skier's side cut may be a factor.

Turn Shape: what path the ski takes. Often in conjunction with looking whether the skier is using braking or shaping to control speed. Common descriptions include C, J or Z shaped turns.

Drill: a task or exercise used to enforce a desired performance or retain knowledge

Exercise: situations and tasks to help break down and isolate certain movements and skills for development. Often combined into a progression.

Progression: a sequence of acts, movements, or events that increase in difficulty and are designed to meet a goal or outcome.

Instruction: prescriptive language that is directed towards improvement on agreed goal or outcome.

Feedback: clear information given to help clarify if a desired result was achieved

Understanding the Body Performance and Ski Performance as they relate to the fundamentals:

Note: While it is important to make improvements or refine an individual skill/fundamental, it is critical to effectively blend these together for various tasks, conditions, steepness etc. For example, short radius vs long radius turns, powder vs hard packed, groomed vs ungroomed and flatter vs steeper terrain.

10

COMMON MISTAKES SKIERS MAKE



WHICH ONE ARE

YOU?



Understanding MA through the Beginner Zone



Forward stance

The ankles are flexed, knees extended, hips flexed. Pressure is directed to the front of the skis.



Aft Stance

The ankles are extended, knees flexed, hips slightly flexed. Pressure is directed from the heel piece back.



Squatted Stance

Ankles slightly flexed, flexed knees, and flexed hips. Pressure is centered or slightly back due to the over flexing of the hips to counterbalance the flexing of the knees.



Tall stance

The ankles are extended, knees slightly flexed, hip slightly flexed. Pressure is centered. Adding a little more flexion to all joints would help create a more ideal stance in order to have more range of motion.



Ideal Stance

The ankles, knees, and hips, are flexed so that the CM is over the BOS. The athlete is ready to move in any direction. Pressure is directed to the center of the ski



1. Wedge upper body tilt

Ski Performance: The skis are in a wedge position with pressure and edge angle starting to increase on the right ski at the end of the video. **Body Performance:** The skier's CM is evenly distributed between the BoS, upper body is slightly tipped towards the right ski



2. Wedge Lock

Ski Performance: Edge angles are asymmetrical, outside right ski tip ahead of inside left ski tip, more pressure on right ski. **Body Performance:** Hip rotates and moves over towards tail of right ski, left leg straightens. Right leg pushed ahead as right knee flexes.



3. Tips cross

Ski Performance: Pressure moved to tail of ski causing tips to be unweighted and allowing the tips to cross. **Body Performance:** Ankles extended knees over flexed, hips positioned over tail of skis, legs rotate slightly inward to create wedge shape.



1. Wedge turn: Aft/leaning in/upper body rotation

Ski Performance: Tail not following tip, high edge angles, pressure towards tail of ski. **Body Performance:** Ankles extended, knees over-flexed. Upper body rotation, feet well outside of hips, over-flexed knee inside ski, body tipping/leaning over inside ski.



2. Wedge turn: Upper body rotation/variable wedge size

Ski Performance: Tail not following tip, outside ski is turning faster than the inside ski, large wedge to start turn with smaller wedge at the end of the turn. Pressure is centered or slightly aft on the skis. Body

Performance: Upper body rotation is used to start the turn and outside leg is pushed out. The lower body catches up with upper body in the finish phase of the turn.



3. Wedge turn: Upper body rotation/outside leg extension

Ski Performance: Tail not following tip, high edge angles, pressure centered or slightly aft. **Body Performance:** Upper body rotation is used to start the turn. The rotation of the hip/upper body causes the outside leg is extended through the turn while inside leg has a more flexed ankle and knee. Feet well outside of the hips.



4. Wedge turn: Asymmetrical edge angles/ pressure aft and in

Ski Performance: Outside ski at a high edge angle, inside ski edge is low or flat. Pressure is directed towards the tail of the ski and more on the inside ski. **Body Performance:** Upper body leans over inside ski. Outside leg is extended while inside leg is flexed at the ankle and knee. Rotation is coming from the upper body.



5. Wedge turn: Knees together/ aft

Ski Performance: Skis are in a small wedge with high edge angles, pressure is directed towards the tail. **Body Performance:**

Knees are tipped towards each other. Knees are over flexed. CM is aft due to extended ankles and flexed knees. Rotation is coming from the legs.

Movement Analysis in the Intermediate Zone



Observation: What, when and how it is happening.

1. The turn shape and size are not symmetrical making for inconsistent uniform speed control. Z shaped turns opposed to C shaped turns.
2. As a whole, the skier looks choppy and inconsistent as opposed to being smooth and flowing.
3. The initiation phase of the turn is a quick up and pivot to the finish phase with little time being spent in the shaping phase of the turn.
4. Body movements are up and back as opposed to movement toward the direction of the next turn.

5. Body's center of mass in relation to its base of support. The body is back and inside with little to no separation between legs, hips and upper body. Excessive uphill ski leads are also prevalent. Pressures on the skis are mostly aft and on the heels. Excessive inside ski pressures are also prevalent.

6. Body joints being flexed are mostly the hips and knees with little to no ankle flex. Edge angles are created through an inclined body as opposed to using a more angulated posture.

7. Body movements are up and back as opposed to movement toward the direction of the next turn.

Evaluate: Why is it happening.

1. The inconsistent, steep, choppy and bumpy terrain is a major contributor to this skier's multiple issues.

2. Another major contributing factor is the skier's center of mass and its relationship to the base of support. Excessive non-uniform abrupt flexing in the hip and knees with little to no interaction with flexing ankles. This forces the body to have an inside and back unbalanced posture that is enhanced with the difficult terrain. Ankles, knees and hips are not working together in a smooth flowing fashion.

3. This inside and back general posture creates all sorts of issues.

A. Non-balance skiing posture creates stiff rigid body muscles that are unable to generate separating rotary movements. There is little to no separation between legs, hips and upper body. Excessive uphill ski leads are also created through this unbalanced posture rather than developed through balanced smooth flowing rotating of the feet.

B. Non-balanced skiing posture creates edge angles by inclining the entire body inside as opposed to creating edge angles using the ankles, knees and hips. This also forces excessive pressures on the inside ski as opposed to balanced pressures to the outside ski.

C. Non-balanced skiing posture also creates harsh, abrupt and quick interactions between the skis and the snow. The skier's inability to manage these pressures using the ankles, knees and hips in a smooth balanced flowing fashion creates these inconsistencies with balance. Excessive abrupt pressures are also being solely channeled to the rear of the skis as opposed to smooth flowing balanced turns using the entire ski.

Prescribe: Prescriptions for changing the skier's performance.

Over the years I have realized the more words that come out of my mouth during a ski lesson, the less the student understands and comprehends. Having the student work on multiple tasks at once is almost always a prescription for a non-productive lesson. I try to work on one task at a time.

Prescription one is to move the student to terrain that is smooth, not too steep with a consistent pitch. Take the variable of the steep, choppy, bumpy and inconsistent terrain out of the equation. This will help the student to solely focus on making smooth flowing medium to short radius turns using the entire ski through a smooth flowing consistency using the ankles knees and hips.

Focus on balancing exercises which keep the body's center of mass over its base of support. C shaped turns as opposed to Z shaped turns. Exercises which force the uniform flowing engagement of the ankle.

Skating, short radius to medium radius turns, leapers with a smooth landing, etc.

Side slipping exercises to feel upper and lower body separations while balancing on the skies as well as edging exercises to feel a more balanced edge engagements using the ankles knees and hips.

Exercises focused on balancing to the outside ski. Shortening the uphill ski exercises and pulling the uphill ski back during the shaping phase of the turn.

Emphasize body movement priorities which move across the skies towards the direction of the new turn as opposed to an up and pivot movement. Work on engaging the new outside ski earlier in the turn.

Move to more difficult terrain once the subsequent skiing processes are mastered.

Movement Analysis in the Advanced Zone

Carving



Observe: what, when and how does it happen?

Evaluate: why is it happening?

Prescribe: prescription for changing the students' performance.

Movement Analysis in the Advanced Zone: Rotary Movements



Observe: what, when and how does it happen?

Evaluate: why is it happening?

Prescribe: prescription for changing the students' performance.

Movement Analysis in the Advanced Zone: The Ankle



Observe: what, when and how does it happen?

Evaluate: why is it happening?

Prescribe: prescription for changing the students' performance.

Movement Analysis in the Advanced Zone: Turn Phase and the Edge



Drawing upon the work of various learning theorists, PSIA-AASI's education tenets explore four approaches to how students learn:

- VAK – Information enters the brain through three primary senses: visual (through sight), auditory (through sound), and kinesthetic (through feeling).
- Four Learning Styles (Feeler, Watcher, Thinker, Doer) – Students have a preferred (though not necessarily exclusive) learning style, i.e., way of processing information.
- Motor Skill Acquisition – Students move through three stages of learning when acquiring a new skill: initial, elementary, and mature.
- The CAP Model – Students have three distinct modes of development: cognitive (how they think), affective (how they feel in terms of attitude and social/emotional needs), and physical (how they move in terms of psychomotor skills)

MOTOR SKILL ACQUISITION

Prevailing theories hold that when learning a new movement pattern – regardless of the sport or outcome – people move through three levels of motor skill acquisition:

- Initial: At this stage, learners make crude movements lacking in rhythm. They focus more on sensation than quality.
- Elementary: At this stage, learners start to gain some control, and look at the body part to connect what is happening with movements. They generally enjoy exploring movements if they feel in control, and focus on active avoidance of fixed or moving objects.
- Mature: At this stage, the learners' movements are refined, coordinated, and mechanically correct. They are able to pay equal attention to the environment, other people, and tasks at hand.

Do you Balance with your Arms and/or Hands?



HANDLING A SPLIT / GROUP YOUR STUDENTS AS TO THEIR:

- 1. AGE**
- 2. ABILITY**
- 3. GOALS**

ALSO SPLIT GROUPS THROUGH:

- 1. VERBAL SPLIT:** *Ask a student if they have skied before etc*
- 2. VISUAL SPLIT:** *Watch and assess your students' movements.*
- 3. ABILITY SPLIT:** *Assess by ability.*

Most important learning tool while teaching is TERRAIN SELECTION.

New Terrain / Old Task

Old Terrain / New Task

Never take a student on terrain they cannot handle or, "They are going to have a bad Time."



Ski Boots vs Tennis Shoes

Ski Boot vs Tennis Shoes

What is the difference between walking in Ski Boots verses Tennis Shoes

The Ankle.

The ski boot limits the flex of the ankle which makes it much more difficult to walk and balance as opposed to walking in tennis shoes which allows ample flex of the ankle for balance and control of your body movements.

On the positive side, the stiffness of the ski boot permits the means to distribute pressure fore and aft along the length of the ski as well as laterally to engage the edge. Pressure distribution from foot to foot is also enhanced as well as rotary movements to guide the ski through a turn.

As a result the ski boot is a compromise.

While the stiffness of the ski boot compromises balance resulting from less flex of the ankle, it enhances fore and aft, rotary as well as lateral control of the ski.

Understanding and feeling this compromise will enhance your skiing experience.