SENSE-ational Skiing and Riding

4 things you will experience for the next 90 minutes:

- Identify multiple sensory cues you can use in your lessons
- Review terminology
- Define ski or snowboard specific body movements with a small group of peers, share out to large group
- Explore, create, discover at-home, stationary and on the slopes drills that will strengthen effective body movements to positively affect your ski or board performance

This session will help broaden your understanding of the fundamental mechanics, body movements and generate discussion on how drills and exercises can assist in changing movement patterns.

In skiing and riding, the **SENSES** we primarily use are hearing (words, sounds), seeing (watching, demonstrations), touching (sense of motion, feelings/sensations, touch) to gather information for learning to happen; when we incorporate more than one of the senses into our teaching, the learner's mind can compile information from all the senses and the learning becomes more meaningful and useful. *How we experience the world*.

Use a variety of descriptive words for the different senses. Below are some examples; you may add to the list. Help your staff and/or students SEE, HEAR AND FEEL your words – creating meaningful and powerful learning experiences.

What do you SEE?	What do you HEAR? What does it SOUND LIKE?	When doing this drill, you FEEL?
Visual words.	Words that describe sounds.	Touch/tactile, feeling/motion, texture.
		Words that describe feelings.
Flexion/extension	Loud/soft	Rough/smooth/flowing
Leg rotation/whole body rotation	Noisy/quiet	Skid/carve/slice
Pretty/ugly	Icy "Crrrrrr" (skid)/fluffy	Sticky/Slick
Dirty/clean	Crash/Boom/Bang/Snap!	Soft/hard/quiet/loud
Big/little/small/tall/gigantic/tiny	Thump	Wet/dry/gritty/fluffy
Pizza/French fries	Wind, from speed	Pinch/stretch/pressure
Rocket/Airplane	Skis, on snow	Push/pull/slow/fast
Arrow/"11"	Tingling	Resist/absorb/contract/relax
Terrain	Squeaky/Crunchy	Light/heavy
Color	"Oh-ah"	Front/back of boot
Shape	Clatter	Icy/Vibrating/chattery
Appearance	Faint/deafening	Snow "pushing back" against skis/board
Vibrant	Earsplitting/Shouting/Serene	Витру
C, Z, S	To sizzle, hiss, shriek	Where do you feel? Front, back, ball of foot,
Use hand gestures to demo	Snappy/Snap! Pressure quick	middle of foot, heel, ankle, hamstring, etc.
Use their hands to "show" them how you want		Rubber band twist & release
them to move their feet/legs		Trampoline



Skills, what the SKIS can do (ski performance):

- Edge control: tipping the skis relative to the length or longitudinal axis of the skis. Used to increase or decrease the ski to snow angle. *Frontal Plane*
- **Rotational control**: turning the skis about the vertical axis of the body. Used to affect the direction their skis point. *Horizontal/transverse Plane*
- **Pressure control**: managing forces acting on the skis. Skiers manage the distribution of pressure along the length of the skis, transfer pressure from ski to ski, adjust the overall magnitude of the forces acting on the skis. *Pressure control requires movements to manipulate forces.* The forces affect the action of the skis on the snow. *Sagittal Plane*

Frontal

Sagittal

Transverse

5 Alpine Fundamentals, MECHANICS of Skiing:

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

Skills, what the BOARD can do (board performance):

- Tilt: the act of creating an angle between both edges or one edge and the sliding surface. Frontal Plane
- **Twist:** the act of applying a torsional force that changes the amount of edge angle and pressure along the length of the snowboard. *Horizontal/Transverse Plane*
- Pivot: the act of rotating a snowboard around a particular point or axis along its length. Horizontal/Transverse Plane
- **Pressure:** the act of managing the degree and location of forces between the snowboard and the snow along the snowboard's length (tip to tail) and width (edge to edge). *Sagittal Plane*

6 Snowboard Fundamentals, MECHANICS of Snowboarding:

- Manage the board's pivot through flexion/extension/rotation of lower body, together with, separate from, or in opposition to the upper body
- Manage edge angles through a combination of inclination and angulation
- Manage torsional flex of the board using independent or simultaneous flexion/extension of lower body joints
- Manage the relationship of the center of mass (CM) to the base of support (BOS) to direct pressure along the length of the board
- Manage the relationship of the center of mass (CM) to the base of support (BOS) laterally to direct pressure across the width of the board
- Regulate magnitude of pressure created through board/surface interaction

Alpine – Break into 5 groups, 1 group per Fundamental Mechanic:

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- Identify skill for each Fundamental Mechanic.
- Identify body part & movements that manipulate each of the fundamental mechanics.
- Demonstrate (visual) & describe (auditory, feel/touch) effective body movements to manipulate the fundamental to the entire group.

Skills = Ski Performance	Alpine Fundamental Mechanics	Body Parts	Body Movements	Use descriptive words for different senses: SEE, HEAR, FEEL or TOUCH
	Control the relationship of the center of mass to the base of support to direct pressure along the length of the skis			
	Control pressure from ski to ski and direct pressure toward the outside ski			
	Control edge angles through a combination of inclination & angulation			
	Control the skis rotation (turning, pivoting, steering) with leg rotation, separate from the upper body			
	Regulate the magnitude of pressure created through ski/snow interaction			

Snowboard – Break into 2 groups, 1 group per Fundamental Mechanic:

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- Identify skill for each Fundamental Mechanic. ٠
- Identify body part & movements that manipulate each of the fundamental mechanics. ٠
- Demonstrate (visual) & describe (auditory, feel/touch) effective body movements to manipulate the fundamental to the entire group. ٠

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Skills = Board Performance	Snowboard Fundamental Mechanics	Body Parts	Body Movements	Use descriptive words for different senses: SEE, HEAR, FEEL or TOUCH			
	Manage the board's pivot through flexion/extension/rotation of lower body, together with, separate from, or in opposition to the upper body						
	Manage edge angles through a combination of inclination and angulation						
	Manage torsional flex of the board using independent of simultaneous flexion/extension of lower body joints						
	Manage the relationship of the center of mass (CM) to the base of support (BOS) to direct pressure along the length of the board						
	Manage the relationship of the center of mass (CM) to the base of support (BOS) laterally to direct pressure across the width of the board						
	Regulate magnitude of pressure created through board/surface interaction						