

# EXPLORE THE EXTREMES

by Jenn Lockwood

Explore, have FUN and get out of your comfort zone while exploring the extreme ranges of movement available in the fundamental mechanics of skiing.

Are you in search of the "perfect turn"? Admittedly I have spent countless hours practicing tasks and body movements to master the elusive "perfect turn." I have witnessed others doing the same. My best advice was - go ski! You should explore a variety of terrain and challenging conditions, slow things down, and speed things up. You'll learn more from challenging yourself, losing your balance and regaining balance than all that practice in the quest of the "perfect turn."

The most powerful lesson I've learned is there are MANY ways to make the "perfect turn" and experimenting with how you move can help you learn to be more adaptable to changing terrain, conditions and speed; versatility is the goal. Specifically, explore with the extreme range of movement in the body, specific to the five fundamental mechanics in skiing. How flexed or extended can you be while skiing? Try initiating turns with whole body, upper body, and lower body rotation? Can you make turns with only inclination or angulation? Make turns pressuring the tail of the ski, tip of the ski, tip of the ski at initiation and tail at finish. When we explore the extremes in lessons I witness students laughing and being more playful on their skis, and students discover which movements create the most effective ski performance for the desired outcome. When we experiment, play, have fun and laugh, we are more open to learning.



Exploring the extremes allows a student:

- To learn how the body moves and adjusts to forces, flow, space and time, and how these movements affect the ski performance.
- To practice in discovering the optimum movement for ski performance.
- To gain awareness of the appropriate range of motion and recover when thrown out of balance, over-rotated, pressured or edged.

Drills are boundless when exploring extremes!

HERE ARE THREE OF MY FAVORITES:

## 1 ON A SCALE OF 1 TO 10

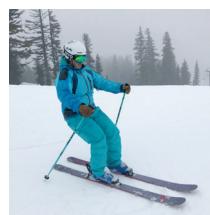
### Skill: Pressure

*Fundamental: Control the relationship of the center of mass to base of support to direct pressure along length of ski.*

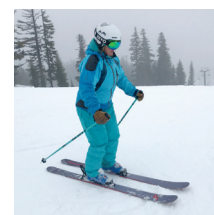
### How to:

- Set the scales. 1 = pressure applied as far forward on skis with ankles flexed, knees, hip and spine extended; 10 = pressure applied to tails of skis with ankles extended, knees flexed and hip and spine extended. All other numbers move from one end of the spectrum to the other.
- Before starting, ask each group member which number they think will lead to the best position for best ski performance. Upon hearing their answer state, "Let's go ski and find out!"
- Partners ski single file. Partner behind calls out a number between 1-10 and allows the front partner to ski a number of turns in that position; repeat with a different number and switch partners.
- Allow each skier an entire run to explore all positions.
- Gather at chairlift: What did it feel like at a "1"? "10"? Did the turn shape vary? Did the skis skid, slip, slide? What did you feel in your body?

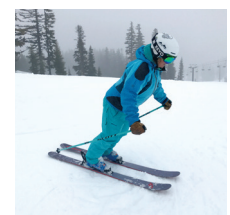
In February, I used this drill with a group of National Ski Patrollers at Anthony Lakes. Prior to executing the drill they all stated that "5" was the best position for ski performance. At the end of the drill, they stated "3-6 is the best position and it varied depending on the pitch of terrain and speed we skied." **A-HA!** These ski patrollers learned the power of experimenting in a fun and relaxed way while discovering the "sweet spot" to best direct pressure along the length of the ski based on environment, accuracy and speed.



TEN >>>



FIVE



<<< ONE



# 2

## BARBIE vs. THE GORILLA

### Skill: Edging

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

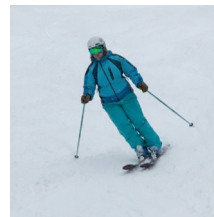
### How to:

- Barbie Doll/Leg Locker Turns: Begin in a tall, extended and narrow stance. Initiate the turn with inclination and maintain an inclined position throughout the turn. This results in minimally edged and pressured skis that make a skidded turn.
- Cowboy/Gorilla turns: Begin in an over-flexed, wide stance. Initiate a turn in a flexed and inclined position and develop angulation through the finish of the turn.

Students preferred Cowboy/Gorilla turns over the “Barbie Doll” turns because the skis could be more easily edged, pressured and rotated to create a rounder and more controlled turn. However, as one student mentioned, “I think a stance somewhere in the middle of the two might be JUST RIGHT.” **A-HA!** The student has discovered that skiing with the ankles, knees and hips flexed, with feet hip width apart, they are in a better position to effectively blend their skills to utilize ski design throughout the turn.



Barbie ▶▶▶



◀◀◀ Cowboy/Gorilla

# 3

## WHOLE BODY ROTATION vs. LEG ROTATION EXPERIMENT

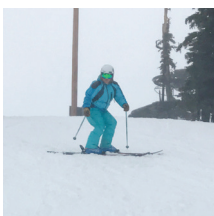
### Skill: Rotary

*Fundamental: Control ski rotation (turning, pivoting, steering) with leg rotation, separate from upper body.*

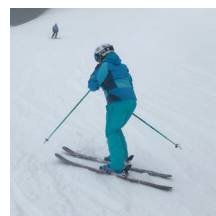
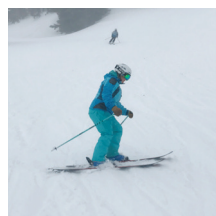
### How to:

- Form 2 teams, in separate lines
- Boots only (or with skis)
- Team 1 performs hop turns using whole body rotation. Team 2 performs hop turns using leg rotation. Perform 20 hop turns, the team that completes 20 first are the winners. Who will finish first? Team Leg Rotation, or Team Whole Body Rotation?

I’ve used this exercise successfully during Steeps Clinics. Each time I’ve completed this drill the leg rotation team has finished first. This has demonstrated that steering with the legs will complete a turn more quickly than whole body rotation. Quick turns are essential on steep and narrow terrain. Next I ask, “When would whole body rotation be effective?” There is flat terrain often from the steeps to the chair and we’ll perform flat 360 spins. **A-HA!** Through these drills students discover the different application of whole body and leg rotation.



Legs ▶▶▶



◀◀◀ Whole Body

**Breaking news: There is no “perfect turn”!**

There are a variety of turns that are “perfect” for a variety of desired outcomes, turn shape and terrain. Exploring the fundamental mechanics of skiing can help students gain awareness of how they can move, how far within each range they can move while still maintaining control, balance and the ability to create the desired outcome of the ski performance.

Skiing the extremes can be fun, absurd, hilarious and goal-directed. As a final point, in providing FUN exercises you can keep participants loose, relaxed and laughing; providing a memorable and enhanced learning environment.