# Ski Spectacular Instructor Academy 

Hosted by The Hartford Ski Spectacular December 4-8, 2023

## Clinic Notes

## Owning Fundamental Mechanics in Peer-to-Peer Movement Analysis Barbara Szwebel

Clinic Date: Wednesday, December 6, 2023, 9:30 AM - 12:00 PM
Understanding the basic steps of Movement Analysis. They are the same for skiing, snowboarding, or using any other kind of snow sports equipment, be it standing or sitting down, the following steps need to happen:

1. Observation and Description (what are we looking at)
2. Evaluation (determining cause and effect relationships)
3. Prescription for Change

## The Five/Six Ski and Snowboard Fundamentals

1. Control the relationship of the center of mass to the base of support to direct pressure along the length of the ski / board. = Keep your center of mass over the base of support - fore and aft, while moving on a ski or SB
2. Control pressure from ski to ski and direct pressure toward the outside ski = Control the relationship of the center of mass to the base of support to direct pressure along the width of the board. = Same principle different tool
3. Regulate the magnitude of pressure created through ski/snow interaction $=$ Control the magnitude of pressure created through the board/surface interaction.
4. Control the skis rotation (turning, pivoting, steering) with leg rotation, separate from the upper body = Control the board's pivot through flexion/extension and rotation of the body.
5. Control edge angles through a combination of inclination and angulation $=$ Control the board's tilt through a combination of inclination and angulation.
6. Control torsional flex of the board using flexion/extension and rotation of the body.
II. The Observation/Description phase will allow us to look at all different skiers and riders, no matter their disability or the equipment they use to slide on. Be clear what your student is working on = task, then observe and describe body \& ski / board performance in regard to the fundamentals.
III. Continue the MA process by Evaluating the Movements you described:
A. Real vs Ideal - What is the task, what are the limitations, especially with our differently abled students!
B. Cause and Effect - Why am I seeing $\qquad$ , this action? Internal, external causes? Is this something your student can change with awareness and practice ?
C. Prioritize - which movements, if changed, will have the greatest positive impact?
IV. Prescription for Change
A. Focus on the root causes
B. Address Motivation/Understanding needs
C. Develop an alternative movement pattern.
D. Provide instruction and time to practice,
then give some feedback and more opportunity to own the new movement!

Barbara Szwebel 2023

