MOVEMENT ANALYSIS

OBJECTIVE: Continue to develop the ability to provide a clear and concise description (observation) of what we are seeing, with an emphasis on tool/snow interaction. From there progress into observing and describing body movements, and adding Evaluation (cause and effect).

Observation – Observe and describe the tool/snow interaction.

Evaluation – Aids in assessing your observations and distill complex technical information into simplified, accurate conclusions.

Prescription – The skier/rider's (student, instructor or athlete) goals as the basis for your plan combined with observation and evaluation, will guide the prescribed pathway.

Observation: Observe and describe the tool/snow interaction.

Describe what the tool (ski or snowboard) is doing in the snow. What evidence do you see?

- Sliding, Slipping, Skidding

Describe what the skis are doing in relation to each other.

- Similar edge angles
- Skis are being guided at a similar rate
- Skis/Snowboard pivoting from the middle, front, or back
- Maintaining a parallel relationship
- Turn Shape: C, J, or Z
- DIRT and Direction

Describe when and where in the turn.

- Top half
- Bottom half
- Transition

Describe the skill application and evidence of observation using:

- Edge Control
- Pressure Control
- Rotational Control
- Tilt
- Twist
- Pivot
- Pressure

Observe and describe body movements.

- Where the movement(s) originates
- Body Part Specific
- Movement Pattern
- Location Specific (when in the turn)
- DIRT and Direction or TID bits

MOVEMENT ANALYSIS

Fundamentals from the Alpine National Standard – Describe the movements affecting the Skill Application:

- 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.

Evaluation: Aids in assessing your observations and distill complex technical information into simplified, accurate conclusions.

Real vs. Ideal – Comparing the skiers/riders current performance to the optimal performance for a desired outcome.

Cause and Effect Relationships – Typically body movement or position is the **CAUSE** of the ski/board performance and the ski/board performance is the **EFFECT**.

- Where the movement(s) originates
- Body part specific
- Movement pattern
- Location specific (when in the turn)
- DIRT and Direction or TID bits

Prioritize – Develop the ability to prioritize which movements, if changed, which would have the greatest positive impact on the skier/rider's performance.

- Movements that positively or negatively affect the skiers/riders athletic stance?
- Movements that positively or negatively affect the skiers/riders overall balance?
- Do I see ski/snowboard actions I except to see for the task?
- Do I see effective technique and tactical choices for the task?

Prescription: The Skier/Rider's (student, instructor, and athlete) goals as the basis for your plan combined with observation and evaluation will guide the prescribed pathway.

Focus – Provide a focus or task

Drill – A Movement Pattern "lateral" to typical skiing/riding used to develop a specific skill or blend of skills, with a technical or tactical purpose in mind

Exercise Line – Progression: Stationary, Simple, Complex, Whole (Skiing/Riding)

Demo – Give a specific movement or action to observe, demonstrate to support your description

Provide Instruction/Feedback – Precise, Simple (to the point), Check for Understanding