



## Ski Spectacular Instructor Academy

## Hosted by The Hartford Ski Spectacular December 4-8, 2022

## **Clinic Summary Notes**

**Clinic Topic:** Functional Assessment and Application to Biomechanics of Stand-up Skiing – Kendra Betz <u>Kendra.Betz@comcast.net</u> and Beth Fox <u>bfoxblizzard@gmail.com</u>

- 1. Success in alpine skiing requires the guest to understand, achieve, and maintain as best possible an active, athletic stance with the ability to distribute weight along the length of the ski(s). This basic stance is much like positions required for other sports.
- 2. Perform an efficient physical assessment on each guest. Findings will help to determine lesson plan, lesson pacing, safety, goals, and learning activities.
- 3. The physical assessment begins by initial observation the guest, often when they are not aware that the assessment has begun. Often, good really information can be obtained from just watching how the guest moves across a space and dons and doffs a jacket or shoes.
- 4. Asking good interview questions usually results in valuable information from the guest about how they move and what their strengths and challenges might be during the ski lesson.
- 5. Performing a broad screening of movement skills and challenges gives insight as to where you need more specific information. Think about and use the screening tools shared in the session and use the following resources: MSD Manuals <u>www.msdmanuals.com</u> and the APTA Movement Screen <u>www.apta.org/patient-care/interventions/movement-system-management</u>.
- 6. Assessment processes can vary and the one covered in this session is below:
  - a. Balance and coordination
  - b. Strength and Endurance
  - c. Flexibility and range of motion
  - d. Posture and symmetry
  - e. Sensation and joint proprioception
  - f. Orthotic devices
- 7. Relate assessment information to current performance of the 5 Fundamental Mechanics and offer movement coaching or replacement movements, if required, to help the guest achieve the fundamental movements required for the ski action desired.
  - a. Control the relationship of the center of mass to the base of support to direct pressure along the length of the skis
  - b. Control edge angles through a combination of inclination and angulation
  - c. Control the skis rotation with leg rotation, separate from the upper body
  - d. Control pressure from ski to ski and direct pressure toward the outside ski
  - e. Regulate the magnitude of pressure created through ski/snow contact
- 8. Read about diagnoses, Fundamental Mechanics, and assessments in the following PSIA publications: *Teaching Snowsports, Adaptive Alpine Technical Manual;* and the *Adaptive Instruction Supplement: Diagnoses & Medication Classification* all available at <a href="https://www.thesnowpros.org/education/digital-manuals-for-every-discipline/">https://www.thesnowpros.org/education/digital-manuals-for-every-discipline/</a>.