

So you think you're literate? Physical literacy and its relevance to skiers

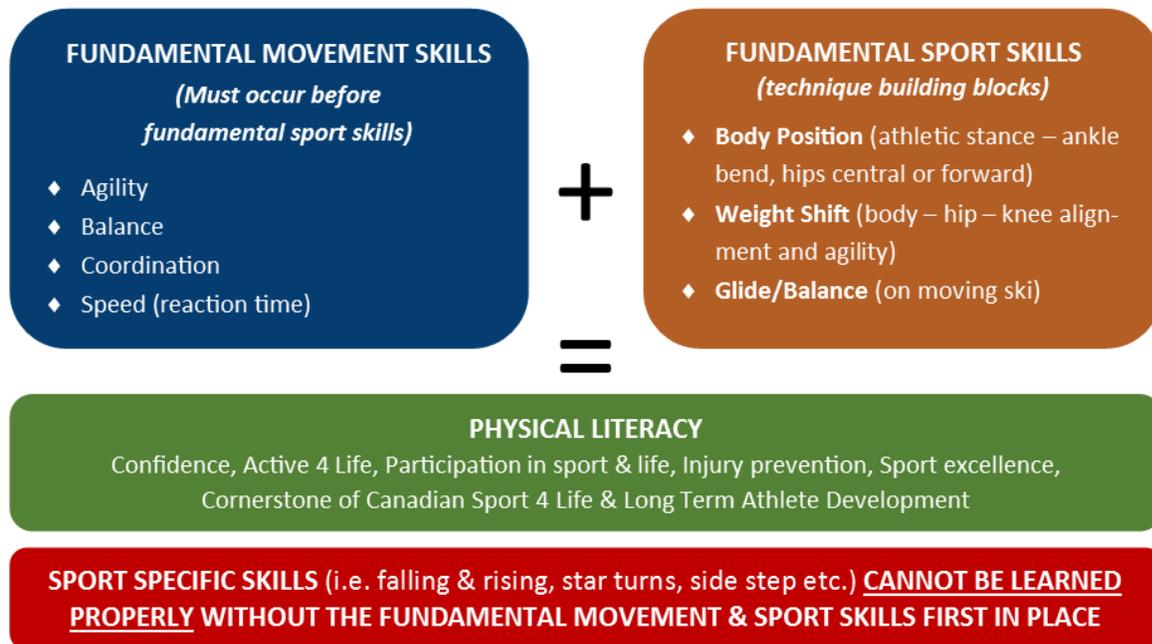
Beyond the realm of words and numbers is the lesser-known but equally important world of "physical" literacy. And how you stack up has implications for skiing and your ability to participate in other sports and life.

Physical literacy is the ability to move with control and confidence in a wide range of activities, situations and environments – on the ground, in the air, in water and on ice and snow.

For skiers, physical literacy translates into those sought-after fundamentals of: agility, balance, coordination, and impulse speed – grouping nicely into the CANSI biggies of Stance and Balance, Timing and Coordination and Power and Propulsion.

Despite research that tells us that you won't achieve your genetic potential (in sport) unless you acquire physical literacy before the onset of puberty, fear not! Continuously working on fundamental movement and sport skills can lead to huge gains in your skiing and the skiing of your clients and athletes.

A breakdown of physical literacy



Ideas to take you there

A dedicated practice of dryland activities that support the physical literacy skills for skiing while off-snow will lead to considerable gains once on-snow. Most folks are hard pressed to find sufficient on-snow time, making that "10,000 hours to achieve mastery" very elusive.

The following exercises help develop balance, agility and coordination in different positions. How do they specifically relate to skiing? These exercises develop adaptability by forcing responses to perturbations in balance through additional movement patterns or sensory alterations. This has considerable on-snow applicability where continual surface and terrain variability occur. These exercises can also be adapted to an on-snow movement on skis practice. Remember, safety first! Start easy and assess then add more challenge.

Airplane with rotation STANCE & BALANCE



- ◆ Stand on one foot, other leg extended back, torso leaning forward, arms out to the side (all parallel to ground), pelvis level,.
- ◆ Slowly rotate torso to the inside and then the outside.
- ◆ Try to look up to the hand pointing up.

How it relates to skiing?

Any balance-related exercise has applicability to skiing. Balance takes time to develop—working on it on a daily basis can translate to big on-snow wins.

Core strength and stability.



Progressions

- ◆ Modify ankle , knee and/or hip flexion on standing leg to simulate pre-load, extension and flexion .
- ◆ Bring focus of attention to standing foot—modify weight distribution (forefoot and across lateral foot).
- ◆ Close eyes - removing visual stimulus sharpens other systems.
- ◆ Variable surfaces - wobble boards and cushions, balance boards, bosu balls, slack lines.
- ◆ On –snow—static and dynamic.

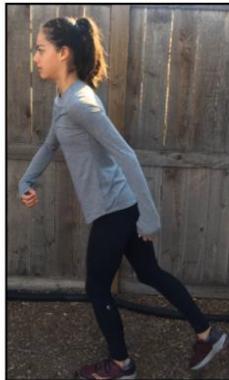
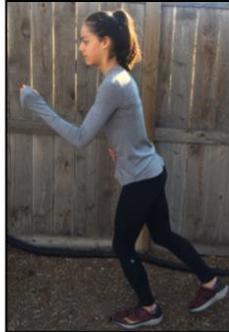
Cross-body movement patterns TIMING & COORDINATION

How it relates to skiing?

This exercise improves general inter-limb coordination, brings awareness to different limbs and joint groups and can be adapted to focus on ski-specific timing for both technique and power impulses. Additional dryland focus can improve skiing efficiency and effectiveness.

Progressions

- ◆ Modify to mimic any ski stance or movement patterns (i.e. poling action, fluid flexion and extension, hopping off).
- ◆ Use your imagination for movement patterns.
- ◆ Close eyes - removing visual stimulus sharpens other systems.
- ◆ On –snow—static and dynamic.



- ◆ Stand on your left foot with a flexed ankle.
- ◆ With the right leg extended behind, simultaneously rotate the right ankle clockwise.
- ◆ Move the left arm up and down in a poling motion.
- ◆ Pretend you are drawing a string out of your bellybutton with the right hand, thinking of pulling the hips high and forward.

Improving your own physical literacy and that of your athletes and clients can result in significant skiing improvements, foster increased participation in other sports and activities, improve function in daily life, and boost confidence. Building on the fundamentals in both dryland and on-snow contexts on a multi-time-per-week basis (even for a few minutes at home) will go a long way to honing those Stance and Balance, Timing and Coordination and Power and Propulsion fundamentals.

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