**Thunderbolt Overview**

Thunderbolt training helps kids improve their skiing using courses. They will be skiing on their tails, which creates more rotation and banking.

Exercises help them move forward, develop inside lead, and angulate.

The progression is usually: static, traverse, garland, fan, linking turns, and courses.

Extreme and opposite moves can be very helpful breaking movement patterns, increasing awareness of how they move, and helping them recover, plus they are fun.

The focus is on helping them make more offensive moves toward the next turn.

It takes a long time to execute these simple moves because they are opposite natural movements. The kids will only achieve so much in the limited time we have with them, but clear goals and precise feedback will help them improve.

Choose exercises appropriate for the ability of the group and focused on a specific need. The skills: edging, rotary, pressuring are affected by movements in 4 directions; fore/aft, lateral, vertical, and rotary.

These are all elements like building materials for a house. The key thing is the blueprint or formula for what to do with the elements.

You can find excellent exercises in this Snow Stars video. Can you find 17 exercises and what they are working on developing?

<http://www.vivatexte.com/eprep/includes/waspPopup.asp?url=http://www.vivatexte.com/eprep/cscf/cscf_shared/techman/vids/right/all_duals_en.swf&width=640&height=480&user=husky&lang=english>

USSA Center of Excellence TV- maneuvers can indicate a problem with a skill, but break down the problem into smaller parts to develop the skill.

<http://www.dartfish.tv/Presenter.aspx?CR=p1490c3372#!AQECAAECASwNAAABAQEAAAABAQEScDE0OTBjMzM3Mm0xNjk1NzIwAAAA>

Please see the Exercises section of the Ski Instructor’s manual for more exercises-

Here are key exercises-

1) Flexing ankles progression-

- Statically stand in an athletic stance and flex the ankles forward. Watch for unwanted additional moves especially flexing at the knees. Then traverse while flexing the ankles, again make sure nothing extra is added.

- Loosen the power strap and top buckles. Flex the ankles in a traverse, and then do a fan exercise. Watch for unwanted banking, rotation, and moving back especially as the traverse steepens and the speed increases. Provide precise verbal feedback to shape their performance. Do part of this progression each week to build a foundation, like playing musical scales. At least do the static exercise and an uphill christie in each direction.

2) Angulation drills- combine ankle flex and hip angulation drills (flex and tip) for all these drills.

- Statically stand in a skiing stance with inside lead. Practice flexing the ankles and tipping (flex and tip.) Use the uphill ski pole in front of the feet for support.

- Hold poles horizontal; progressively tip the poles and shoulders (flex and tip)

- Slide downhill hand from the hip to the knee (flex and tip)

- Put hand on knee and continuously increase pressure (flex and tip)

- Put hand on hip and progressively push the hip inside the turn (flex and tip)