



Good hand position is directly related to fast skiing in a course. The hands should be forward for balance, with the elbows slightly bent.

LISA DENSMORE BALLARD

GATES 101: HOW RACE TRAINING MAKES YOU A BETTER SKIER... AND GETS YOU MORE CLIENTS

By Lisa Densmore Ballard

For snow pros, the ability to ski through gates is a valuable skill. Consider these three common scenarios: 1) A racer wannabe walks up to the snowsports school desk. The other instructors don't turn in gates well enough to teach them,

but you've got the know-how, so you get the lesson. 2) Your client eyes the race arena from the chairlift and wants to try it. You respond with an enthusiastic "Let's do it!" rather than a tepid "Maybe next run." And you end up with a happy repeat customer. 3) You win your mountain's beer league race. Others want to know your secrets. *Voilà!* You've got a new clinic to coach.

During my women's ski clinics around the United States, I often use a NASTAR-style course as a teaching tool. The women range in ability from lower intermediate to expert. Ninety percent of them would not consider going near gates if they weren't part of my program. Some are scared to death at first, but I emphasize that the session is not a race clinic, *per se*. It's a confidence builder,

VIEW VIDEO



Author Lisa Densmore Ballard applies her gate-training tactics to a recent GS run at Montana's Red Lodge Mountain.

and it teaches skiers how to avoid "shopping for a turn" because the gates dictate the line where you have to turn. And it works.

When the women return to the open slopes, they are more agile on their skis and more proactive in placing their turns.

I tell people to think of running gates as a drill in which the goal is to simply make all the gates. Usually within a run or two, they're addicted. You will be, too. Here's how:

The Start: While skiing down a course is typically equated with skiing as fast as you can, take it slow at first. In the starting gate, place your poles over the wand and your shins close to it. Your ski tips should point where you plan to initiate your first turn, not at the first gate. Push out of the start to test it, then stop and get ready to sideslip the course.

Inspection: Inspecting a course is a safety measure, and it helps reduce anxiety. Sideslip down the course, examining not only the placement of the gates but also nuances of the terrain. Plan where you're going to make each turn. It helps to mentally rehearse sections of the course to learn them, especially where there's a change in rhythm. If you know where the tricky parts of the course are, you can be better prepared for them.

Line: Racecourse newbies tend to ski to each gate and then turn, resulting in a later and later line. Ironically, better skiers, attempting to ski aggressively, also tend to go at the gates too directly. In general, aim to make two-thirds of the turn above each gate so that you finish the turn just as you pass by it.

Look Ahead: Looking two to three gates ahead is a must if you want to ski the correct line. It gives you more time to react. If there are, say, 25 meters between each gate and if you only look one gate ahead, you've got 25 meters to plan your next turn. But if you look two gates ahead, you have 50 meters – twice the distance and thus twice the time to figure it out, which will make you more fluid.

Technique: Unless the course is straight and you're in tuck, put 100 percent of your weight on the outside ski. The inside ski should match the edge angle of the outside ski and be available if the outside ski gets knocked off edge, but it should have no pressure on it. Try to carve every turn. Skidding slows you down and also makes you have less control. If you're skidding, you're likely leaning into the hill (gate) or sitting



Fast skiing in a course requires separation between the upper and lower body, and room. Notice how much farther this racer's skis are from the gate than his torso, especially his outside ski, which has all of the pressure.

back – a less stable position that makes it harder to initiate turns, increases chatter, and minimizes edge grip. Unless you need to put on the brakes, control your speed with turn shape and carve cleanly on the downhill ski.

Tucking: A tuck might feel fast, but it can actually be slower if you don't do it correctly and at the right moment. Your knees should be under your shoulders when you bend forward at the waist, such that your skis glide flat on their bases. Your chest should

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This racer is turning slightly in her tuck. To maintain her speed, she raises her torso just enough to allow her skis to roll cleanly on edge, and she keeps her hands in front of her face to remain as aerodynamic as possible.

be low, with your back curved slightly toward the sky rather than flat or arched. Raise your hips as you lower your chest and suck in your stomach slightly to round your back. Your hands should be together and extended in front of your face. The two most common mistakes are having your chest too high and separating and dropping your hands. If either of these occurs, you're like a windsock catching the air rather than an aerodynamic wing slicing through it.

Tuck Turns: To turn in a tuck, raise up enough to give your lower body space to roll your skis on edge. Your hands should remain together, extending forward at face level and pointing toward the tip of your outside ski, *not* at the upcoming gate. If you feel any skid in your skis, it's faster to get out of your tuck and carve the turn. A carved turn makes the ski bend and then rebound, even if only slightly, which propels you more quickly toward the next turn. A carve slices through the snow surface with less drag and holds onto the hardpack, keeping you on your line.

Beware of Banking: Another common mistake is banking, or leaning toward a gate as you pass it, which flattens the skis and takes pressure off the outside ski. When you bank around a turn, your outside leg is in line with your torso, causing weight to be on both skis. If it's icy, your skis will chatter. When turning, a proficient racer has pronounced separation between the upper and lower body. In mid-turn, the legs should travel laterally to the side and not remain under the torso. The shoulders are a good cue; they should be level with the snow. Check your hands, too. Dropping the inside hand as you pass by a gate causes you to tip toward the gate.

More Hand Habits: Your hands should be calm and in a position similar to that for skiing on other parts of the mountain. If you thrust them forward as you pass by a gate, your skis will flatten as your butt goes backward. And don't forget your pole plant! Similar to skiing on the open slopes, a pole plant is both the cue to start the next turn, and it helps re-center your weight as you enter the transition.

HOW SETTING GATES CAN BRING HARD-TO-LEARN CONCEPTS TO LIFE

By Tanya Milelli

Armor-clad kids whizzing around the mountain in search of speed aren't the only ones who benefit from race training. Running gates offers skiers of all ages and abilities opportunities to improve. Outcomes are clearly defined, feedback is immediate, and improvement happens almost by default through experience. Setting gates enables instructors to create a learning environment that develops the tactical and decision-making skills that enhance performance.

Teaching skiing technique is a relatively straightforward process (identify a skill deficiency, isolate and develop that skill, and bring it back into skiing). However, teaching the more abstract elements of skiing – such as turn shape, timing, and tactics – is not as simple. You can draw in the snow to illustrate turn shape, employ counting to develop timing, and use terrain to promote tactics. While these methods are effective, they can be somewhat conceptual. Gate training gives skiers something more tangible – a turn shape they can see, a visual indication of when movements happen, and obstacles that force decision-making.

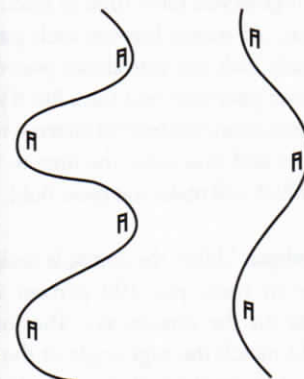
In a course, skiers will make the desired turn and ski a particular way because the course requires them to. Gate training gives instructors the opportunity to guide students toward a particular outcome while putting them in control of their own learning with a heightened awareness of their performance and the mistakes they make. By experiencing how their choices impact performance, they gain a clearer understanding of the outcome and learn to make tactical decisions. Gate training is

experiential learning at its best, and everyone can benefit from more of it. Here's how those abstract, hard-to-teach concepts are brought to life:

TURN SHAPE: IT'S ABOUT MORE THAN C'S AND Z'S

Turns are complex. There are phases, transitions, vertical distances, horizontal distances, and apexes. That's a lot of stuff that needs to be managed to produce the desired turn. Training in gates takes some of the guesswork out by setting limits.


Every course is set by measuring the vertical distance between gates as well as the horizontal distance, or offset. This spacing defines the size and shape of the turn. Greater distances produce a larger turn while smaller distances produce a shorter turn. More offset creates a wider turn while less offset creates a shallower turn. With a drill in hand, instructors can create the turn shape simply by defining the path, or line, down the hill.



Hitting Gates: Unless you're Bode Miller, both in physical size and skill, don't hit the gates in a NASTAR-style course. They might knock you off balance. Brush by them with the sides of your body, but give your feet space around the gates. The harder the turn, the more space your feet need to allow a greater edge angle with your skis. (In ski racing, the higher the edge angle, the higher the performance of the turn.) Your torso might brush the gate slightly,

but if you have proper separation between your upper and lower body, your feet might be two feet away in order to attain a high enough edge angle to arc the turn.

Finishing Faster: The stretch between the last gate and the finish line is the one place where it's okay to take the straightest possible line. Even experienced racers often make too much of a turn around the last gate or an extra turn in order to go through

the middle of the finish. If you take the shortest possible path between the last gate and the finish, you'll be faster! 

A former U.S. Ski Team member, **Lisa Densmore Ballard** is a member of PSIA-AASI, a coach with U.S. Ski & Snowboard, and author of the recently updated *Ski Faster, Guide to Ski Racing and High Performance Skiing*. She runs various race camps as well as Your Turn women's ski events. Website: LisaBallardOutdoors.com.

WHEN TEACHING GATES...

Certain age groups require you to adjust how you coach ski racing technique. Here are some nuances to keep in mind:

Young Kids. Kids less than 10 years old tend to bend too much at the waist and have too wide a stance in a racecourse. First, correct their stance out of the racecourse. This often fixes bending at the waist as well. Then let them run the gates again. If their stance widens, go back to the open slopes to work

on proper stance. If a kid is just trying gates, keep it fun and go easy on the coaching. If, however, a kid wants to ski faster, work on their stance first.

Adults. Adults who have never skied in gates are mainly worried about falling. Before taking a run down the entire course, have them try it in sections, starting with two to three gates at a time. Work up to the whole course as their confidence builds. Be their cheerleader, too, emphasizing what they are doing

successfully rather than what they are doing wrong.

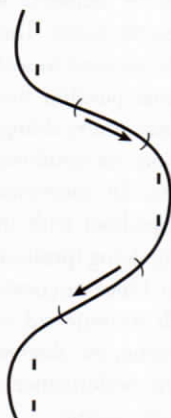
Seniors. Senior skiers often have limited flexibility in the hips and lower body, and many have bad backs, joint replacements, and other medical issues. Concentrate on line, hand position, and not tipping into the gates, rather than worrying about how low their chest is in a tuck or how much separation of the upper and lower body they can achieve.

—LDB


TIMING: THE RIGHT THING AT THE RIGHT TIME

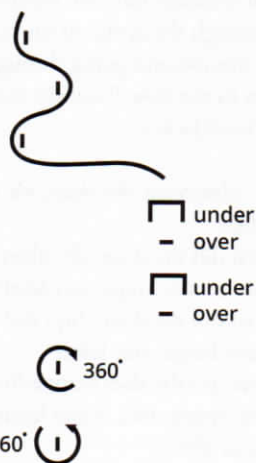
Markers in a course are visual indicators that direct skiers and guide their movements. Strategically placing markers, or setting drill courses, enables the instructor to show skiers when to change edges, plant their pole, finish the turn, flex/extend, and much more. Adding markers such as brushes, stubbies, or dye to a course can further define or change the line. A shaping phase can be elongated, an apex placed at a certain point, or a transition lengthened.

There are an infinite number of ways markers can be used and courses set to influence timing. The key is that the use of these props should give skiers something tangible with which to associate the timing of movements.



forces skiers to vary turn shape and size while also adjusting the timing of movements and the skill blend being utilized. Think of a racecourse like an obstacle course. It is a way to challenge skiers to adapt and develop versatility in their movements.

(Do keep in mind, that instructors might not have easy access to gate-setting equipment, and safety concerns do come into play. For example, courses need to be closed off from general slope traffic. Anyone setting gates needs to investigate and follow area policy. Rather than set your own course, it may be possible, with proper permission, to use the area NASTAR course or "poach" a course set up by a local race team when not in use. Alternatively, you may be able to incorporate some elements of gate training with cones, dyes, and other props in suitable, low-traffic areas.) 



TACTICS: WORKING WITH THE MOUNTAIN

Tactical skiing is all about reading situations, making decisions, and reacting to what happens to us. Being able to choose the best skill blend, vary the timing of movements, and choose turn shape and size appropriately enables us to ski *with* the terrain and not against it.

Setting courses is often called an art form. There are lots of different ways to place gates, and the more creative an instructor is the more adaptable skiers are forced to be. Changing gate spacing through a course and strategically placing gates on terrain features or with/against the fall line

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