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32 DEGREES

THE JOURNAL OF PROFESSIONAL SNOWSPORTS INSTRUCTION | SPRING 2013

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Pete Wurster, owner of Unity Snowboards, becoming one with his creation. Gore Range, Colorado. JEFF CRICCO

32 DEGREES: The Journal of Professional Snowsports Instruction

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Spring 2013

COVER SHOT: PSIA Alpine Team member Nick Herrin sets the cruise control at Colorado's Beaver Creek Resort. Photo by Earl Saline.

32 DEGREES

The Journal of Professional Snowsports Instruction

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VISION:
Inspiring life-long passion for the mountain experience

MISSION:
We support our members, as a part of the snowsports industry, to:
- Develop personally and professionally
- Create positive learning experiences
- Have more fun

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CHAIRMAN'S MESSAGE

Membership is Key that Unlocks Doors

By Eric Sheckleton
PSIA-AASI Chairman of the Board

I have been thinking a lot lately about just how much PSIA-AASI offers its members—and not just the resources and benefits that are easy to access year-round, but also in the way we experience the mountain lifestyle, with camaraderie, support, and deep friendships that we may have never enjoyed anywhere else.

It started when I was having coffee with Michael Hickey, a past PSIA Alpine Team member, trainer at Bridger Bowl, and a friend of mine who happened to bring up the idea that PSIA-AASI membership is a key to opening many different doors. Michael talked about the access it gave him to different people and ideas that helped him achieve the goals he set for himself. This idea of membership as a key really resonated with me on a number of levels.

Of course, membership is a key to helping instructors improve personally and professionally in the ski and snowboard industry. Look at any issue of *32 Degrees* and you'll see testimonials of how membership helped someone become a better instructor and improve as a skier or snowboarder. Membership offers access to training tools, new ideas, and a host of clinicians and examiners at every level. All of these open doors to new opportunities for achievement or advancement. It also provides access to amazing people dedicated to helping their customers and colleagues make their own dreams come true. I am lucky to count legends like Mike Shaw, Jerry Warren, Mike Porter, Ray Allard, John Armstrong, Randy Price, Lane Clegg, and Michael Hickey, to name a few, as friends who have helped me achieve my goals and become who I am. And many more members impact me on a daily basis, teaching me something new about myself.

This experience is probably pretty common for our members. We set long- and short-term goals and train to achieve them. This happens daily within ski and snowboard schools, as well as through ongoing educational events, examination clinics, special occasions such as National Academy, and even through our website and social media pages where members can instantly connect from wherever they are.

Those connections are effective off the snow as well. For example, a few years ago my wife and I began a personnel company specializing in the hospitality industry. We provide staff and management for motels in Montana, and have anywhere from 50 to 100 employees, depending on the season. We may have started this without my experiences with PSIA-AASI, but these experiences helped me develop confidence interacting with people that I certainly would not have had otherwise. Not a day that goes by that I don't use a tool I acquired through PSIA-AASI. I frequently find myself using concepts from our *Core Concepts* manual, especially with regard to Maslow's Hierarchy of Needs, and the sense of safety, belonging, and self-actualization that help us all be more successful. The certification processes I have participated in have helped me focus on active listening, problem solving, and group management, not to mention guest service. And, of course, our Patagonia relationship offers us a quality, cost-effective way to look like true mountain professionals, on or off the snow.

Members far and wide have similar stories. Unfortunately, there are not enough full-time, year-round careers in the ski and snowboard industry for us all, so many pursue other interests for personal and professional development. This is another area in which our vast network of instructors, clients, and industry contacts contribute to our success, continually building on that sense of potential and possibility that is at the heart of being an instructor.

I encourage you to give some thought to your goals, in and out of the industry. Make a plan and consider what tools PSIA-AASI can offer to help you every step of the way. Consider sharing your story in the PSIA-AASI Member Community, in a post on the PSIA-AASI Facebook page, or by sending your own opinion piece or personal story to 32Degrees@thesnowpros.org. Your experiences may help others find ways to leverage membership into more success in their personal and professional lives.

Not a day that goes by that I don't use a tool I acquired through PSIA-AASI.

At PSIA-AASI, we get people excited about skiing and snowboarding. This means many different things to each of us. For me it is what we do every day on the mountain or trails with our guests, but it is so much more. PSIA-AASI opens doors to the many different opportunities waiting to be explored. 32°

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It Ain't Over 'Til the Fat Lady Sings

By Ole Retlev

Courtesy of Ole Retlev

It's 1972 and I'm snoozing away at work back home in Sweden. I'm suddenly awakened by the annoying ring of a telephone. The voice on the other end says, "Can you be in Ft. Lauderdale next week to help sail a boat up to Annapolis?" I didn't know it at the time, but the foundation for my career as a professional ski instructor had just started to take shape.

A few months later I'm working as a professional yacht racer on the way from Newport, Rhode Island, to Bermuda. Inconveniently disturbed during the race by Hurricane Agnes (think *The Perfect Storm* movie), I realized my yacht-racing days might be limited. Safe on terra firma and relaxing on a warm Bermuda beach, I ran into a group of friendly U.S. ski area operators on the island for a conference. Little did I know that people were skiing in the U.S., and after a few "Dark and Stormys" they got me real excited to ski again.

A few weeks later, now in New York City, I stumbled upon the Scandinavian Ski Shop, immediately entered, and was introduced to the legendary "Whitey" Sundin. Having made my first turns on a pair of Sundin-brand wooden skis with real hickory edges (before bear traps) back in the early 50s—and survived—I instantly trusted the man and we started to talk skiing. I learned that "Greek Peak usually hires a lot of foreigners" so I hopped on a Greyhound

What PSIA-AASI Has Done For Me

Erik Scott

PSIA has been one of many valued resources that has helped enhance my toolbox for effective teaching and coaching, and has amped up my own skiing over the years. I've always felt that the primary reason to teach skiing is to share one's passion (for the world's greatest sport) with others. This means demystifying skiing technique and keeping students safe, making it easier for folks to look good, and instilling confidence.

Of course, upping the fun factor is required so that people come back for many more days on the slope—and feel comfortable taking trips to the mountains for the ultimate in high-altitude enjoyment. The *32 Degrees* magazine and online resources never fail to give me new tips and tricks to keep my ski lessons current, fresh, and fun.

Here is some nearly 100-year-old paraphrasing that states why skiing is such a great sport. These charming words were taken from a 1924 issue of *Skisport* (the National Ski Association of America's journal) and were written by Aksel Holter, a Norwegian immigrant who started one of the first U.S. ski manufacturing companies (aka "ski smithing" back then), in Ashland, Wisconsin.

"Personally, I love the ski-sport for what the sport gives me. It gives me more real pleasure in one day, than many other good sports would in a century. The skis will put in proper working order every muscle, no matter how small or where located in your body. As a constitutional builder, the ski-sport has absolutely no equal . . . all business worries are left behind. Skiing fills my world with harmony and gives me a new lease on life . . . it stimulates your nerve system, making you steady and even-tempered . . . your delight has no limit. Oh, what joy."

Holter's thoughts are as relevant now as they were in 1924. By the way, 8-foot-long Holter Skis had early-rise tip rocker for easier turning (see photo).

Rick Scott

Left to right: Hanna McDonnell, Marit Scott, Helen McDonnell, and Emily Scott—all skiing cousins and also distant cousins of Aksel Holter!

PSIA helps make the sport of skiing more fun by helping us instructors be better at sharing the sport we love. Aksel Holter—a 1956 inductee to the U.S. Ski and Snowboard Hall of Fame—would be proud.

Cindy Scott McDonnell
Alpine Level I
Hyland Hills and Wings for Women, MN


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< VERTICAL CUT FREERIDE
Skier: Robin Barnes
PSIA Alpine Team
Action: Diego Munita/skiportillo

and rode up to meet Gordy Richardson, who noted that I, with my Bermuda tan and ocean-bleached blond hair, "look like a ski instructor" and with my Swedish accent "sound like a ski instructor, so I guess you are a ski instructor . . ." *Wow*!

A quick bus trip to Toronto for a work visa (those were the days) and a couple of days later I was outfitted in the blue and white colors of the Greek flag. After the first ski-off, Gordy told me that my run was perfect . . . "however, you are 10 years behind . . ." Dr. Kruckenhauser, what do you say now? So I had to delete the old Austrian way of turning, re-boot, and adapt the "new and improved" American Teaching Method. Gordon wanted his instructors to be Canadian-certified and after the season ended, a group of determined instructors drove up to Canada to pick up some pins.

One of my examiners was Norm Crerar, who had just landed the job as ski school director at Mt. Snow, Vermont, and he offered me a job for the following winter. With some excellent trainers at Mt. Snow, the next logical step was, of course, to join PSIA and get certified. So we trained and trained and one day stood with shaking knees in front of Cal Cantrell, who, by the way, could have scared the wits out of a Marine drill sergeant, but on this day was in a good mood and after some serious bribery was sympathetic enough to give us some "full cert" pins!

At the awards ceremony, one of the old Austrian instructors told me (here translated to English) "Don't tchu evva give up dat pin, because one day tchu can be de tchairman of IPM and de next day lose your tchob, but then tchu can at least teach skiing until something else comes around . . ." A very wise statement! This is something every instructor should remember and also embroider in cross-stitch, frame, and hang over his or her bed headboard, next to the "East, West, Home is Best" picture.

After some years at Mt. Snow, it was time to join the Gold Rush, pack the covered wagon, and head West to them thar hills in California. Mammoth Mountain is awesome, and Max Good, then the Swiss ski school director, was the poster boy of awesomeness when he stepped out of the gondola at the top of the Cornice, some 11,000 feet up in nowhere, lit a cigarette, and cruised downhill. By the time we Eastern, more technically refined instructors finally made it down, Max was already in the base lodge with his boots off, doing paper work, and nursing another cigarette.

I have never had a "bad" PSIA clinic and the best clinic ever still stands out: Two days at Mammoth in the mid-70s with Stu Campbell teaching a Zen-like approach on how to make guests relax and enjoy the beauty of the mountains. I still pull it out of the "tool box."

After three wonderful years in the Sierra "cement," I headed back East to look at a B&B for sale in the Sugarbush Valley. The inn was not what I had expected, so I signed up with the Sugarbush Ski School and had another great experience. The director at the time, Sigi Grottendorfer, even extended a fabulous pro offer to the instructors; real Dior (with logo and everything) ski goggles. Yes, we looked *hot!*

Sometime in the late 70s I returned to Mt. Snow, which became my ski-teaching downfall (see aforementioned Austrian wisdom). My then wife and I bought a bed-and-breakfast, had a couple of wonderful daughters, then bought a larger inn . . . and I said to myself, "There will not be any more ski teaching as I am now an innkeeper and have a mortgage the size of the national budget of a small country." *Hah! I gave up the full cert to be an innkeeper . . .*"

Eventually we sold that inn and bought a larger B&B outside of Wilmington, Delaware, right on the mid-Atlantic flatlands. One day my old ski nerves finally got to me and I drove up to Blue Mountain in southeastern Pennsylvania. As I was watching the ski instructors glide around on the hill, carefree and without a worry in the world, I made a major decision and not

Courtesy of Ole Retlev

The author, right, receiving his "full-cert' pin from Cal Cantrell in 1975.

long after found myself at Windham, New York, getting reinstated. And how sweet it was! Having the pin back made me feel like I had just graduated from Harvard and won the Monaco Grand Prix; I was back! I was somebody! Well, nicht so schnell. After some years we sold the inn and moved to Florida, and you know what *that* does for one's skiing. I used to hang around the Peter Glenn ski shop in Miami just to convince myself that I still belonged and had a purpose in life.

One morning, after too much strong Cuban coffee, an inner voice spoke to me and told me to go West again. Eventually I found myself across the cafeteria table from John Guay, director of skiing at Deer Valley, Utah. "What kind of turns do you like?" asked John. BLTs, big long turns, I answered while dreamily looking out the window at a couple of feet of new, weightless, dry snow on the hillside. I was handed a green DV ski school uniform and settled in for eight wonderful years in heaven. Then I had to go back to work . . . rats! In order to maintain some dignity, I taught part-time for three years in Trysil, Norway, and now I am back at Deer Valley.

Forty years AGP (After Greek Peak), I still love that peculiar smell in the morning locker room, the guests, the instructors, the teaching, the PSIA clinics, and appreciating all the doors PSIA has opened. What a ride. If you feel the same, I've got some advice for you: Don't you ever give it up. 32°

Ole Retlev is an innkeeper in the Berkshires of Massachusetts. A PSIA-certified Level III alpine instructor, he teaches part-time at Deer Valley, Utah. You'll find him on the web at skiwithapro.us.

PROPER IDENTIFICATION

We misidentified the skier pictured on page 42 of the "Reaching Experts" feature in the Winter 2013 issue. The head of Sugarbush Resort's Bush Pilots program—and the man shown catching air on that deep-snow day at Sugarbush—is John Egan, not Dan Egan.

And as long as we're giving proper shine to the skiers in that feature, the powderhound shown on pages 40 and 44 is Matt Tinker. Keep on skiing the deep, gentlemen!

—Ed

REACH OUT IN 'YOUR SPACE'!

***32 Degrees* welcomes your views! Feel free to write a letter to the editor, opine on a topic near and dear to your heart, or submit an essay on "What PSIA-AASI Has Done for Me." Submissions to the Your Space department may be sent by fax (in care of *32 Degrees*) to 303-987-9489, by e-mail to 32Degrees@thesnowpros.org, or by conventional mail to *32 Degrees*, 133 South Van Gordon Street, Suite 200, Lakewood, Colorado, 80228. Please include your full name, address, and daytime telephone number.**

LINEUP

Sign up online
Log in at TheSnowPros.org and get instant access to all the benefits of PSIA-AASI membership, like pro offers, educational opportunities, association events, instructor tools, and more.

NEWS OF NOTE

McSherry and Urbanczyk Join Staff

In personnel changes that will help the association assess and implement more strategic communications and marketing efforts on behalf of members, PSIA-AASI is proud to welcome William McSherry and Susan Urbanczyk, CAE, to its staff. McSherry will serve as PSIA-AASI's director of partnership marketing and Urbanczyk becomes the association's director of membership marketing and communications.


William McSherry


Susan Urbanczyk

Wendy Schnupp

McSherry, who will strategize, plan, identify, and implement sponsorship, promotion, and marketing programs, previously served the snowsports industry as a product manager for HEAD USA, was a member of the PSIA Eastern Division Development Team, and most recently directed the ski and ride school at Ski Bradford in Massachusetts.

PSIA-AASI Executive Director and CEO Mark Dorsey said, "William brings depth of experience and a unique blend of skills that will strengthen our partnerships and serve our membership well."

Urbanczyk will provide strategic direction to ensure increased member engagement and consistency of member-focused communication and marketing. Most recently director of marketing and communications at the Association Forum of Chicagoland, she has more than 15 years of marketing, communications, public relations, association management, and agency experience.

She previously held multiple positions at the Academy of General Dentistry, where she led the public relations department in the public affairs division. Urbanczyk also developed communications and publicity efforts for multiple corporate and nonprofit accounts at a boutique communications agency.

Said Dorsey, "Susan brings the tools to improve the quality and consistency of PSIA-AASI's communication with members, especially in publications, social media, and conveying the value of membership."

Division Affiliation Agreement Charts Course For Greater Consistency, Cooperation

On February 4, PSIA-AASI's Board of Directors announced five of PSIA-AASI's divisions signed a ground-breaking affiliation agreement that will pave the way for greater consistency of certification standards and a stronger, more unified force for advocating ski and snowboard instruction throughout the United States. Four of PSIA-AASI's divisions had yet to reach agreement at press time, but there was hope an agreement would be reached with them soon.

The agreement—signed by PSIA-AASI Chairman Eric Sheckleton and presidents from the association's Alaska, Central, Northern Intermountain, Northern Rocky Mountain, and Western divisions—evolved from an original 1986 agreement in which divisions agreed to unify under the PSIA banner. This set the stage to develop a unified national and international image of PSIA and later AASI, and better protect the investment members make in their certification.

Noting that the agreement would not have been possible without "the efforts of these five division leaders and a national board committed to the long-term integrity and credibility of our member-focused association," Sheckleton expressed confidence that PSIA-AASI's other four divisions could reach the same accord, since the agreement forwarded for signature received unanimous support from five respective divisional boards. (For additional information, go to https://www.thesnowpros.org/NewsInformation/agreement.aspx.)

PSIA-AASI Continues Support for Adaptive Outreach

Now in its third year, the grant-funded PSIA-AASI Adaptive Outreach program continues to expand. This season, the program distributed 793 individual pieces of PSIA and AASI educational materials (manuals and DVDs) to 24 different not-for-profit adaptive nordic, alpine, and snowboard programs and affiliated adaptive snowsports organizations in 13 states.

The program is now closed for this year, but if you are interested in being on the mailing list to be notified of future programs, please e-mail education@thesnowpros.org with your contact information, adaptive nonprofit organization name, and primary contact.

Ben Roberts

PSIA-AASI Teams Again with REI for Introductory Ski, Snowboard Lessons

As part of January's Learn to Ski and Snowboard Month (LSSM)—PSIA-AASI teamed again with REI (Recreational Equipment, Inc.) to help teach the basics of skiing and snowboarding and offer lessons from certified instructors.

An enhanced "Learn to Ski or Snowboard Class" is available through March at participating REI locations and local ski resorts. REI Learn to Ski and Snowboard classes demystify the sports of skiing and snowboarding, with the goal of helping new and lapsed skiers have an easy and fun experience. The classes provide an opportunity to learn something new, spend time with friends or meet new ones, exercise outdoors, and have something fun to do in winter—which, according to the LSSM website (skiandsnowboardmonth.org), are the top reasons people get into snowsports.

"We're excited to grow our partnership with REI and expand into more markets this year," said Mark Dorsey, PSIA-AASI executive director and CEO. "These classes are unique in that REI is the first retailer to bring an indoor component of learn-to-ski-and-snowboard programs all the way to the outdoors, by including on-mountain instruction. We're sharing lessons we've learned so PSIA-AASI can help other retailers, manufacturers, and resorts support their learn-to-ski-and-ride industry programs."

"We're pleased to continue growing our partnership with PSIA-AASI," said Rebecca Bear, REI outdoor programs and outreach manager. "Our goals are well aligned—to grow the snowsports industry through inspiring educational experiences. Due to the success of our 2012 pilot program, we're excited to expand this program from three markets to 11 markets this year."

The two-part class includes a two-hour presentation at participating REI stores about how to get started in skiing and snowboarding. The following day, participants receive an on-mountain lesson hosted by PSIA-AASI certified instructors and local ski resorts. The class series is designed to help attendees

- learn the basics about appropriate equipment and clothing, including ways to stay warm and comfortable;
- gain an understanding of what to expect when learning to ski or snowboard;
- practice basic techniques for getting started skiing or snowboarding; and
- meet like-minded people who also want to learn to ski and snowboard.

Each class offers a complete package with rental equipment, in-store and on-mountain instruction, lift ticket, transportation, lunch and additional offers from the mountain. Participants, 18 years of age and older, can learn more or register at www.rei.com/outdoorschool.

HOT

Sherri Harkin

Cross-country skiing. From U.S. Ski Team success to grassroots initiatives like Winter Trails Day, XC exercise is HOT right now.

Taking snow safety courses and packing an avalanche transceiver, shovel and probe for any trip beyond the ski area boundary.

Joining all of your peers and pals on the PSIA-AASI Facebook page, and by following PSIA-AASI on Twitter.

Grant Nakamura

Going for a new level of certification this spring—because the best instructors know that learning is an active endeavor.

NOT

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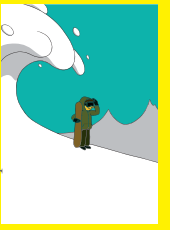
Jogging on a treadmill, because it's boring and you're not outdoors.



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Being unprepared for any kind of wild snow situation, whether it's via lift-accessed OB gates or deep in the backcountry.

iStockphoto

Missing out on all of the insight and instructional expertise that professional instructors around the country have to share.

iStockphoto

Forgetting that learning is a lifelong journey.

NSAA Op-Ed Declares: 'There's No Such Thing as Sidecountry'

As backcountry and lift-served out-of-bounds skiing and snowboarding continue to grow in popularity, the National Ski Areas Association (NSAA) felt it was time to remind the industry and consumers

that the dangers are the same no matter how far they venture from ski area boundaries.

In a December op-ed titled, "There's No Such Thing as Sidecountry," the NSAA declared, "The truth about 'sidecountry' is that it doesn't actually exist—at least as far as the ski industry's leading avalanche and snow science experts, the U.S. Forest Service, ski area risk managers, patrollers, and other experts are concerned. While it's difficult to discern its origin, the term sidecountry is likely a marketer's brainchild. And there are similar terms, such as slackcountry, backcountry-lite, and others that have been added to skiers' and snowboarders' lexicon in recent years.

The appeal of these terms is obvious: If you're an intermediate to advanced skier or snowboarder who is curious about backcountry skiing then taking a run down an area perceived as sidecountry would be a logical first step. Meanwhile, consumer ski and snowboard magazines, websites, and social media outlets implore their readers to 'Ski the Sidecountry'—all while appearing to suggest that all that's needed to do so is a pair of the latest powder skis or a new snowboard. Yet what's left unsaid is that this so-called sidecountry carries with it all the same inherent risks and dangers as the remote backcountry."

NSAA went on to state that, "these terms seem to imply that some portions of backcountry are kinder and gentler than other areas. Yet those with their boots to the ground know that, generally speaking, there are only two places for which to ski and/or snowboard: within a ski area's operating boundary, and outside of the ski area's operating boundary. And just because it's terrain that lies adjacent to the ski area boundary and can be accessed via chair lift, does not mean that the forces of nature are any less severe. Indeed, avalanche risks are inherent to the sport both within, and beyond, a ski area's boundary."

Both the op-ed itself, as well as a reply from PSIA-AASI member David Bond, continue to spur conversation on the PSIA-AASI website at TheSnowPros.org, as well as at the PSIA-AASI Facebook page at PSIA-AASI, where your comments are always welcome.

Do You Know How to Log in to the Website?

PSIA-AASI's national office is always eager to help answer member questions, and one of the most common ones is, "How do I log in to the website?" Here's the scoop:

1. In your web browser, enter "www.TheSnowPros.org" (and if you want to save some keystrokes, you can even forego the www.).
2. At the top of the homepage, click "Login."
3. Enter your e-mail address as your username. (This has changed from the days when you'd use your national I.D. number as your username and password.)
4. Enter your national member I.D. number as your password (unless you've previously changed your password to one of your choosing).
5. Click "sign in."

That's it! Once you're logged in, you can access pro offers, the online *Accessories Catalog*, the digital edition of *32 Degrees*, and much more! Of course, if you don't know your e-mail address, would like to establish an account, or need help accessing your member account, feel free to contact PSIA-AASI member services at mist@thesnowpros.org or 303-987-9390. 32°

WIN!

Where Do You Read *32 Degrees?*

Barbara Tew, a PSIA-certified Level II instructor at Utah's Park City Mountain Resort, sometimes goes to lofty heights to read *32 Degrees*—as you can see from this photo taken in a certain Salt Lake City choir loft.

"I enjoy spending my downtime during rehearsals and performances with the Tabernacle Choir reading *32 Degrees*," writes Barb. "This photo was taken in front of the organ console, and you can see a few of its 11,623 pipes in the background."

The choir—Barb and 360 of her closest friends—performs about 150 times a year.

"Whenever we sing songs with the word 'mountain(s),' my mind has me skiing down a 'Utah Powder'-filled slope, imagining a face shot or two," adds Barb. "Heavenly!"

We bet you have an equally righteous place where you like to read *32 Degrees*, so have someone click a high-resolution pic of you in said locale and send it on in—with your name and some explanatory details—to 32Degrees@thesnowpros.org. You just might win a $25 gift certificate to the PSIA-AASI *Accessories Catalog*!

ROAD TRIP WORTH TAKING

Whether you're a regular attendee of National Academy, or have been thinking about attending the event for years, the 2013 session at Snowbird, Utah, is something you absolutely don't want to miss. That's because this is the first Academy in which skiers and snowboarders—as well as the PSIA Alpine Team and AASI Snowboard Team—will be sharing the slopes of Snowbird together, sharing teaching skills, on-mountain scoops, and plenty of off-slope stoke. In what could very well be a PSIA-AASI event of future legend, the clinics, personalized coaching, and five days of cutting-edge instruction will end your season on a high note. Find out more on the Events & Programs page at TheSnowPros.org.

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PROFESSIONAL SKI INSTRUCTORS OF AMERICA

MOVEMENT MATRIX HIGHLIGHT

New video clips are now up on the *Movement Matrix*, the online instructional resource available to PSIA-AASI members for free at TheSnowPros.org. The most recent additions include brand-new clips about adaptive equipment, e.g., the components of mono-skis, bi-skis, and fixed and handheld outriggers; as well as footage for how to get up from a fall independently and with assistance.

The new content, which PSIA-AASI Adaptive Team Coach Kim Seevers describes as "an invaluable education tool for instructors," represents an ongoing commitment to enhance the breadth and value of the *Movement Matrix* for PSIA-AASI members.

SPONSOR SPOTLIGHT

BURTON SNOWBOARDS

LOCATION: Burlington, Vermont

YEARS IN THE BIZ: Founded in 1977 by company namesake Jake Burton.

WEBSITE: Burton.com is actually one of the most entertaining and informative websites in all of action sports. From blogs to news and video to team member bios, you can happily surf the site for hours before even peeking at all of the great gear.

WHY THEY ROCK: Not content to be the driving force in the popularization and ongoing modernization of snowboarding, Burton continues to maintain a laser-sharp focus on best methods for introducing new people to the sport. From its Riglet Parks to Learn to Ride Programs, the brand has developed several strategies for introducing the snowboarding experience to everyone from kids to adults.

WHAT YOU MAY NOT KNOW: Burton has established Riglet Parks in states from California to Vermont to Texas. In many cases, those parks employ themes such as a treehouse (Smugglers' Notch, Vermont), a farm style with a barn drop-in (Mount Snow, Vermont), a Star Wars Experience (Sierra at Tahoe, California), and the recently unveiled Disney Pixar Toy Story Theme at Jay Peak Resort in Vermont.

LOCKER ROOM TALK

	NAME/ CREDENTIALS	MEMBER SINCE/ DIVISION	WHAT'S YOUR GOAL FOR THE YEAR?	WHAT TWO PALS WOULD YOU TAKE ON A HELI TRIP?	COOLEST THING FOUND ON THE HILL?	WHO GOT YOU GOING ON SNOW?
	**Nancy Kohler,** Alpine Level II	2005 Eastern	To work toward my Level III Alpine certification. I need to improve my powder skills so I have a trip planned to Alyeska, Alaska.	Wendy Brookbank, who coached me at Whistler/ Blackcomb, and Mermer Blakeslee, our goddess at Windham Mountain.	The most amazing, talented, and fun-loving friends. I never underestimate the power of my ski family!	My father got me on the snow at age eight. Our family skied every Sunday night. In fact, I never skied in daylight until I was an adult!
	**Andrew "Bear" Blizzard,** Snowboard Level I	2009 Western	To obtain my Level II certification and expand my teaching abilities.	Charlie Ellingson, (the rowdiest skier I've ever met) and Scottie Haines.	That would have to be the love of my life, Nicole BonDurant.	My parents. I learned to ski at the age of two after I cried and cried and cried.
	**Mary Grayson** Alpine Level III, Telemark Level III, Snowboard Level I	1976 Central	To return near Juneau, Alaska, and ski the wet heavy coastal crud after six years on the well-groomed Midwest hills!	It would have to be my family—my daughter Robyn and husband Rich. They would never forgive me.	I am the one who loses the stuff on the hill—in the locker room, on the team bus, in the bottom of my ski bag.	My dad, who grew up in Vermont. He let me join the Snowflake Club, which was a traveling ski school in the Midwest.

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CMH HELI SKIING

PROFESSIONAL SKI INSTRUCTORS OF AMERICA

AMERICAN ASSOCIATION OF SNOWBOARD INSTRUCTORS

Courtesy of Tommy Morsch

PRO FILE:
TOMMY MORSCH
AASI Snowboard Team Member

What do you do when you're not teaching?

In the winter I build terrain parks and manage a terrain park staff at Bristol Mountain Ski Area (in New York). I do all the cat work and design work, and help with snowmaking layout. I've also started doing some terrain park consulting at Bromley in Vermont, and plan to take at least three trips up there to get in the snowcat and show them how to maintain all their terrain park features.

How did you get into driving cats and designing parks?

I got into it back in 2000 when Bristol developed some more terrain for their parks. I was the snowboard school supervisor and they asked me to help design it, but I didn't want to just get in the cat and give them advice. Once I was in the cat I could see that it was something I wanted to do myself. The second year, both the cat driver and I said how frustrating it was to just have me in the cat giving directions on how to make snow piles, or create features that were bigger or smaller, and how hard it was to explain exactly what I wanted. So somehow I talked them into letting me drive a cat, and that's where I got my start.

What do you like about it?

I like the challenge. I like heavy equipment—in the summer I run bulldozers and do erosion control. I like riding parks, and, coming from a resort that had a crappy park, I knew how much better it was to ride a good park. I wanted to make a park that people really enjoyed. I also wanted to have a place where you can watch the kids grow up and make new advances by building features that allow them to get more experience and have more fun and be challenged, and still be as safe as a terrain park can be.

Are parks set in terms of how they're built, or do they keep evolving?

It keeps evolving. A couple years ago NSAA and some designers tried to make set standards, and to establish how many different pitches and dimensions each feature could have. But what really came out of it was the recognition that there are so many variables and different math involved that you just can't make a perfect jump for everybody. There is no scenario where 1+1 always equals 2, so you have to focus on what you want to do that's unique, and that works for you.

When you go see other parks, what surprises you?

Traveling around, I see the differences from resort to resort. It's shocking how good a park can be at one area, and how just 50 miles down the road some other area has this unmaintained kind of crazy little park. If you're going to have a park, you need to maintain it.

How does building and designing parks help you as a teacher?

It helps me understand freestyle body movements, and the freestyle body mechanics behind different tricks. It helps me coach the factors of speed, pop, and spin that are behind each feature. In addition, it gives me better perspective on all parks, and not just the ones I create.

Is it kind of a yin-yang thing to go from riding to designing?

Pretty much. I'm a pretty quiet guy, and I had to learn to get in front of people to become a teacher. I enjoy teaching, but it takes a lot out of me. Just getting in a cat and pushing snow around and being alone after a day of riding with my students and friends, that's the yin-yang part.

It seems like you're driving big rigs year-round. So what's your equivalent of snowboarding in the summer?

My son and I do a lot of dirt biking. You get a lot of similar thrills to snowboarding the way you go buzzing around the woods at pretty good speeds on tight trails. It's very similar to how it feels on a snowboard or on a bike when you go down a steep trail or over rocks. You look at a lot of similar lines and have the same kind of mentality. It's just that the bike has more suspension than your knees do. That's the big difference. 32°

Horst Abraham

HOF-BOUND INSTRUCTOR TALKS SHOP

Horst Abraham, the author of *Skiing Right* and one of the original architects of the American Teaching Method, will be inducted into the U.S. Ski and Snowboard Hall of Fame in April.

Abraham, who will join freestyle ski icon Wayne Wong and snowboard legend Craig Kelly in the 2013 class, sat down with *32 Degrees* to discuss what the honor means to him personally, and to U.S. ski and snowboard instruction.

32 Degrees: *Horst, congratulations on your upcoming induction into the Hall of Fame. What was your reaction on hearing the news?*

Horst Abraham: Thank you for your kind words. I will receive this prestigious award in the name of the many great people—including a super Demonstration Team and a great Education Team composed of divisional representatives of PSIA—who collaborated in such a productive manner to create the results for which I happen to get "blamed." I want to be sure that it is understood that The American Teaching Method, et. al., the Skills Concept, and the student-centered teaching philosophy grew from fruitful collaboration and productive conflict.

Courtesy of Horst Abraham

32 Degrees: *What are you proudest of in terms of your contributions to skiing and ski instruction?*

HA: While the Skills Concept replaced the focus on national techniques, and student-centered teaching replaced a technique- and instructor-centered teaching philosophy, I am most excited about having helped usher in an era in which a Wikipedia-like environment has been created within our membership. Wisdom, innovation, and best thinking will come from anywhere and everywhere, so "national" can help serve as a clearing house for best thinking and practices. Mobilizing the memberships' and guests' genius is our best chance to move our profession into the new millennium.

32 Degrees: *Do you still find time to get on skis—and if so, what does the sport still mean to you?*

HA: Though I left the ski industry in 1988, I stayed loyal to my passion for learning and teaching by exercising my skills as a coach, teacher, and consultant at the Universities of Michigan and Pittsburgh. There I engage with successful and learning-hungry business veterans who come back to school for their Executive MBAs. This group of battle-hardened professionals continuously remind me that "average is out"!

When I ski it happens in conjunction with my many travels here and abroad. To accommodate my skiing, I will stretch my scheduled teaching assignments to give me time to visit slopes in Europe, South America, and the U.S. While I find my skill levels un-rust quickly, I am limited in my skiing by my declining strength, endurance, and eyesight. When I ski I always take a small recorder with me on which I record my observations of instructors teaching guests. Over the years I have accumulated a half-dozen notebooks with observations, pictures, and interviews with guests in such lessons. I must admit that my heart never left skiing and ski instruction.

32 Degrees: *Can we get a preview of what you plan to say at the Hall of Fame ceremony?*

HA:

1. Acknowledge the selection committee for the honor they bestow upon me.
2. Name those who were instrumental in helping create what I am lauded for.
3. Thank my family, who had to learn to live with little while my passion for skiing and instruction kept me from "getting a real job."
4. Acknowledge that while our profession has come a long way from the past century, we are nowhere near where we have to be as a profession to sit back and rest. My book in the making will address what I mean by that.

32 Degrees: *How do you plan to celebrate the occasion?*

HA: Quietly with my family, friends, and a few colleagues who, like me, are impatient in moving forward. 32°

Who most influenced Horst Abraham? Go to TheSnowPros.org and click on "Web Extras" in the drop-down menu for *32 Degrees* to find out.

WHAT'S IN YOUR QUIVER, PSIA ALPINE TEAM MEMBER MICHAEL ROGAN?

Home areas: Heavenly, California & Portillo, Chile

Heavenly: Mott Canyon/Milky Way Bowl
Portillo: High Traverse/Lake Run
Nordica Helldorado: The Helldorado was built for these kinds of places with lots of wide open spaces. This is a BIG turn, BIG lines, BIG speeds ski. A double-wide World Cup G.S. ski with all the Highrise CamROCK rocker to tame the baddest of mountains. This ski is soo bad-ass it doesn't come with any "new skool, neon, tribal, crime scene graphics" Simple matte black keeps its rivals shaking in awe.

Heavenly: Ski Ways/Epic Race Arena/Gun Barrel
Portillo: Garganta/Condor/Roca Jack
Nordica Fire Arrow 84: This is my daily driver. The Fire Arrow 84 has the best of every ski ever made. There is plenty of sidecut to rip the "EPIC RACE COURSE" against Lindsey Vonn or the Sol de Portillo Race. At 84mm underfoot, it can handle a normal powder day. And the Rapid Race profile tip takes dead aim at Gun Barrel and the Roca Jack.

Heavenly: Patsy's/Maggie's/All Groomers
Portillo: Juncalillo/Las Lomas
Nordica Transfire 78 TI: When I am "on the road" I get to ski with lots of good skiers, so when I am at Heavenly I love teaching beginner adult group lessons. This keeps me in touch with my colleagues and I can experiment with students more. Rogan's Rule #4: "If it relates and makes sense to beginners it will probably work for upper levels too." I am fortunate to have been part of the Transfire development. It was built to help beginners and intermediates progress to the next level. Width, Cam-Roc, sidecut, and mounting position were all designed to consider the need for a ski that makes parallel skidding as easy as possible. This ski gives me the ability to turn beginners into mountain explorers in short order.

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When skiers or snowboarders are killed in an avalanche, the focus of why and how the accident occurred often turns to heuristics. The so-called "rule of thumb" or "educated guesses" we employ in various situations to speed ourselves to a working conclusion, heuristics are essentially shortcuts we make in our minds, using our experience and our assumptions to make quick decisions.

In his article, "Evidence of Heuristic Traps in Avalanche Accidents," presented at the International Snow Science Workshop in 2002, avalanche researcher Ian McCammon identified four heuristics he feels commonly contribute to avalanche accidents: familiarity, social proof, commitment, and scarcity. In brief, those heuristics equate to how familiar a skier or snowboarder is with a given route, whether there is an existing track or evidence that someone else has already ridden the line, how long someone hiked (or how much they paid) to get to their untracked face, and how much fresh powder is available at any given time.

McCammon found that those heuristic traps can often play a greater role in off-piste decision making than more tried and trusted snowpack safety cues such as terrain, snowpack, and weather factors. "Even though people are capable of making decisions in a thorough and methodical way, it appears that most of the time they don't," McCammon wrote.

But according to Utah Avalanche Center Director Bruce Tremper, heuristics, or what he prefers to call mental biases or intuitive decisions, can be effective in certain situations. "They work when they're based on lots of experience in instant-feedback environments," said Tremper. "When you have that depth of experience—when you have your 10,000 hours of training or practice—you are much more likely to make more effective intuitive decisions."

According to Tremper, prior to that 10,000 hours (see sidebar on page 24) of hard-won wisdom, people are too busy learning to make sound forecasts about the potential outcome of certain actions. So much so that even after students have completed an avalanche safety workshop, Tremper still feels like all they really have is the equivalent of a teenage driver's learner's permit.

"That's why I always cringe whenever someone in an avalanche course says something like, 'Well, I just trust my gut,'" Tremper said. "What you really need is a checklist of measurable data, not just some feel-good sensation about how good a route looks."

HEURISTICS AND SNOWSPORTS INSTRUCTION

At the root of heuristics is the question of just how good a split-second decision anyone can make. At its worst, it's based on stereotyping, judging someone on their appearance or accent, rather than what they do or say they want. At its best, it's the instant reaction that prompts you to cover your face at the sound of breaking glass, or stand in a doorway when you feel an earthquake start. And to Tremper's point, all of those reactions are rooted in some form of past experience.

In the book *Blink*, Malcolm Gladwell examines the decision-making process, boiling heuristics down to something he terms, "adaptive unconscious." He contends that achieving some form of adaptive unconscious is a cumulative step in the learning process.

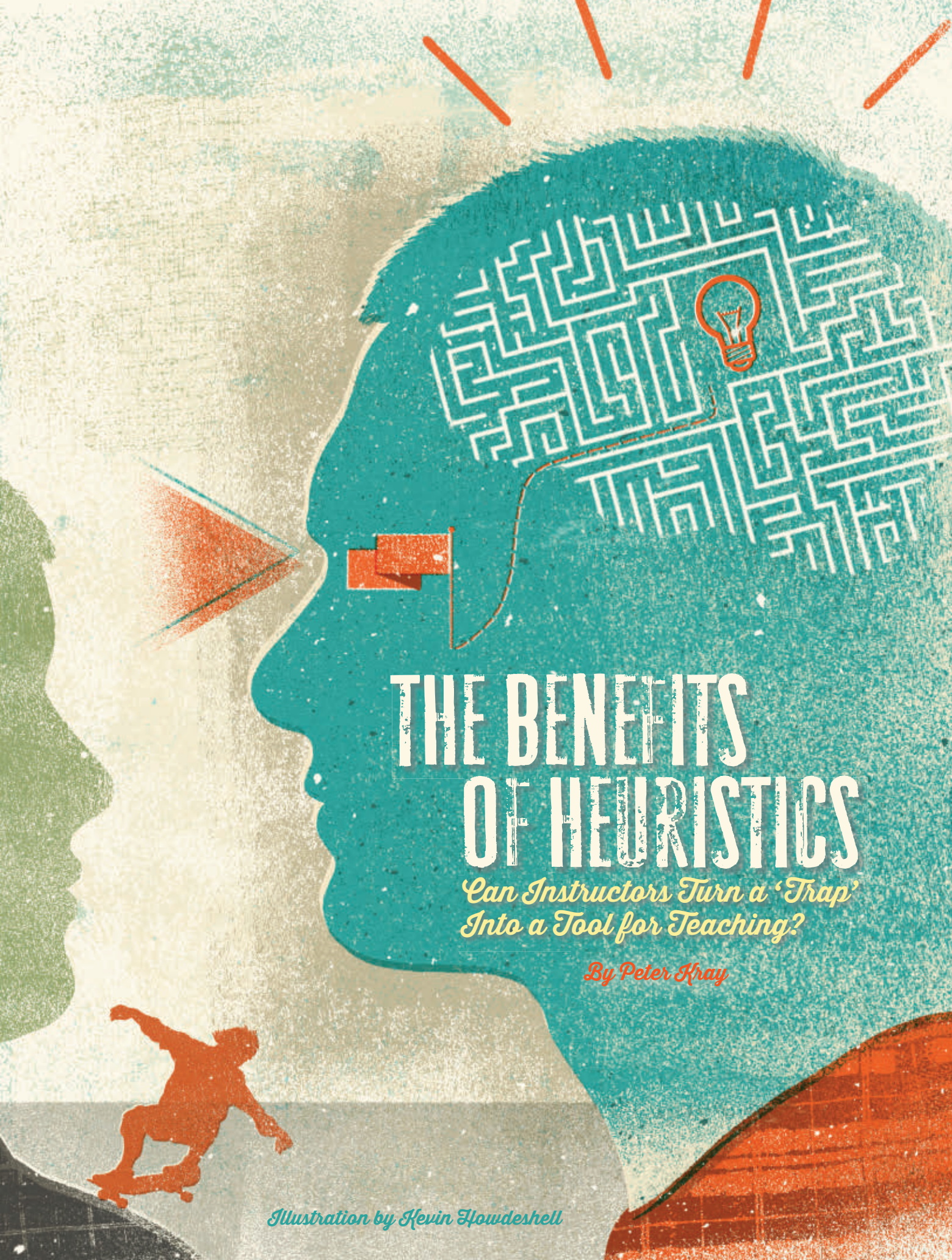
"We have some experiences. We think them through. We develop a theory," Gladwell wrote. "And finally we put two and two together. That's the way learning works."

But for ski and snowboard instructors, understanding heuristics—and being able to make shorthand decisions about how a student might progress in a lesson more quickly—might actually be where learning starts.

"When you say 'heuristics,' it sounds like situational awareness to me," said PSIA Alpine Team Captain Michael Rogan. "And I think the learning partnership is based in large part on just that—using your experience and your observations of a student to help create shortcuts to get them to their goal."

Rogan said the conversation you have with a student when first meeting them is as much about creating a relationship as it is about trying to identify the experiences or skill set they have that you can build on. He said that finding out someone is a figure skater, for instance, would immediately expedite the discussion of equipment and edging in a beginner lesson.

"I think we employ heuristics all the time when we're doing our lesson splits," said Rogan. "If you have someone say that they are an athlete and don't mind being pushed, versus someone who says they're just there to check it out, and don't



THE BENEFITS OF HEURISTICS

Can Instructors Turn a 'Trap' Into a Tool for Teaching?

By Peter Kray

Illustration by Kevin Howdeshell

need to be made into a diehard skier today, then that certainly provides a quick clue on where you place them."

Ditto for AASI Snowboard Team Member Tommy Morsch, who said that finding out someone is a skateboarder or surfer has long been a cue for snowboard instructors to understand what kind of sensations and muscle memory might already be familiar to that student.

Going one step further, Morsch thinks that while the process of beginning to know a student is a kind of search for some sort of learning shortcut, it may also be an end in itself. "Being upfront and friendly and putting your student in a place where they understand you aren't trying to be the boss is a great way to break the ice," said Morsch. "What you're trying to do as quickly as possible is establish a bond and some level of comfort. What really makes a lesson go faster is when the student feels a level of trust."

THE DOS AND DON'TS

For instructors in particular, one of the biggest drawbacks of heuristics might be that they can't begin to encompass all of the variables that are present in teaching people how to ski and snowboard in the first place.

While PSIA Nordic Team Coach Scott McGee jokes that students from the Northeast often "Just want to know what they're doing wrong," or observes that someone who says, "I just want to cut liftlines," isn't actually looking to learn much, he said many instructors make one very common heuristic mistake at the beginning of almost every class.

"I think instructors tend to assume that just because someone is taking a lesson it's because they want to access harder terrain," McGee said. "More often than not, I think people want to ski what they've already been skiing but with more control and style, rather than having you race them up to Corbet's Couloir or to a steep field of bumps."

Like Rogan and Morsch, McGee thinks the best implementation of heuristics is based on information that each student provides about themselves. "If someone comes from a snow zone, then there are a lot of things you can infer about their familiarity with winter conditions," McGee said. "But if they come from some place where they've never had to worry about slipping on an icy sidewalk, then that's a completely different lesson you're going to teach."

There's a similar difference in whether someone in a beginning telemark class has ever alpine skied before, McGee said, or if they have a strong cross-country skiing background, but have never ridden on a lift. "If you're paying attention, then each new piece of information someone provides is going to help you match the lesson to their needs," he said.

It's the instructors who are too reliant on sticking with a single strategy that are more apt to steer their lesson into the snow pro's equivalent of an in-bounds heuristic trap. The antidote, as it has been since U.S. instructors first pioneered the advent of student-centered instruction back in the 1970s, is to be versatile and attentive enough to keep adapting a lesson to the specific needs of each student or class.

Which, McGee agrees, goes back Bruce Tremper's reliance on the 10,000 hour rule and effective decision-making being a byproduct of deep experience. "The more experienced you get, the more shortcuts you have to rely on," McGee said.

The lesson? To always be ready to adapt to new information—not just at the beginning of the lesson, but as it progresses as well—and know that every shortcut can lead to a potential trap. Or as McGee said, "Falling into a heuristic trap in avalanche terrain may cost you your life. Missing a cue in a client, or during a lesson, may result in an injury or cost you a client. Be careful of any time you make up your mind too quickly and put your blinders on, because it could lead to a big mistake." 32°

Peter Kray is the lead content officer for PSIA-AASI, responsible for overseeing the editorial content for the association's multiple media platforms, including 32 Degrees, *TheSnowPros.org, PSIA-AASI on Twitter, and the PSIA-AASI and Go With a Pro Facebook pages.*

The 10,000 Hour Rule

Popularized by author Malcolm Gladwell in his book *Outliers*, the 10,000 Hour Rule effectively outlines how the adage "Practice makes perfect," reflects reality. Using a study by Swedish psychologist K. Anders Ericsson, Gladwell points to musical pioneers such as The Beatles and Microsoft founder Bill Gates, and argues that despite their obvious talents, what really propelled their success was the amount of time they spent practicing their respective skills.

Gladwell says that while Gates benefited from more than 10,000 hours practicing programming on a high school computer in the late '60s, the Beatles biggest boost in becoming famous was their extensive musical apprenticeship in Hamburg, Germany. In relation to heuristics, as avalanche forecaster Bruce Tremper points out, the more experience someone has in a given field, the more likely they are to make split-second decisions accurately. And, in the case of potentially lethal snow conditions, more safely.

— Peter Kray

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THE AASI SNOWBOARD TEAM'S **TONY MACRI** SAYS **YOU DON'T HAVE TO BE AN INSTRUCTOR** TO GET A LOT OUT OF A PROGRAM LIKE THE SEASON-LONG SNOW TRAINERS CAMP.

Matt Fulks

REACHING EXPERTS

WE ASK TOP GUNS WHAT WORKS BEST

BY PETER KRAY

EDITOR'S NOTE: THIS IS THE THIRD IN A SERIES OF ARTICLES THAT EXPLORE THE SPECTRUM OF SNOWSPORTS INSTRUCTION GEARED TO UPPER-LEVEL SKIERS AND RIDERS.

Every ski and snowboard instructor knows that the bulk of the instruction business is based on teaching beginners, intermediates, and kids. But in our "Reaching Experts" series, which began in the Fall 2012 issue of *32 Degrees*, we've been taking a closer look at what kind of clinics, camps, or steep-and-deep classes bring more experienced riders back to class.

Here, in our third installment, we decided to poll the pros about just what kind of game-improvement approach they think works the best. All present or former PSIA-AASI Team members, these are instructors who are as focused on constantly improving their own technique as they are on creating better teaching strategies for everyone else. We're grateful to all of them for taking the time to share their thoughts, and look forward to hearing from all of you about just what kind of lesson plan is most effective, as AASI Snowboard Team Member Eric Rolls puts it, "in attracting the accomplished." Chime in through the PSIA-AASI Community accessed at TheSnowPros.org.

Howard Shao

CHRIS FELLOWS, Director of the North American Ski Training Center

The way to an expert's heart is through their stomach—not an elegant sit-down lunch overlooking the mountain, but through the gut. Experts know intuitively when they have been hoodwinked into a faux expert class, or if they are being inspired by a true professional who has the skills to guide them through a progressive journey of continued improvement and fun.

Peter Oliver, in "Reaching Experts: Making School Cool" (Winter 2013), makes a good point regarding the expert wanting to be guided by a celebrity ski star like John Egan, who can play rabbit through the trees without too much technical talk. However, I have found that specific brand of clinic taker is only one piece of the expert pie. There are segments of that same group that enjoy learning the technical specifics as well as an occasional adventure ski into uncharted territory.

Would-be experts are usually self-driven people who get excited by the process of reaching higher skill levels and experiencing unique adventures. The expert learner is not satisfied with a cookie-cutter experience administered by less accomplished instructors. Many resorts and independent programs have identified the needs of the expert and have re-created the advanced/expert lesson. This lesson usually involves a multi-day commitment that addresses topics like equipment customization, detailed functional movement assessment (indoor and on the hill), advanced video applications, out-of-bounds skill development, mountain tactics, snow safety information, and a vision for what the future holds for their continued improvement. The seasoned instructors who are best suited to lead these experiences can easily move between the roles of coach, guide, technician, trainer, and facilitator relative to the flow of the lesson plan.

When a new expert catches the bug, it quickly spreads to his/her immediate circle of influence. The proof that there has been a change is undeniable, as witnessed in their newfound skiing skills and their deeper knowledge and understanding of the sport. But what truly catches the attention of their friends is their newfound enthusiasm. Without a doubt, the skier retention initiative of the future will be a focus on the expert. Resort managers are realizing the deep effect that inspired guests have on others, and this will be the next big thing in building a more dependable ski and snowboard school customer base.

It's encouraging because now, more than ever, resorts will want to pay a premium for top ski pros who can help build an inspirited new market segment.

Dann Coffey

ERIC ROLLS, AASI Snowboard Team Member

When people think of lessons, they often think of beginners or novice skill instruction. The key to breaking that stereotype and attracting more skilled skiers and riders to ski and snowboard schools is offering "More than a Lesson." That is our mantra at Canyons Resort Ski and Snowboard School in Utah.

Teaching snow sliding skills is just part of what we do for the guest's on-mountain experience. It is generally true that the more novice someone is, the more skills they will need to be taught to explore the mountain completely. In addition to improving their skiing or riding skills, we also show them how to be a part of the snow culture. We want them to be a part of the scene and not feel like such a newbie. We often give them the dos and don'ts of the resort so when they meet up with their friends and family who are good skiers and riders, they can share great information that will benefit everyone. We want the skiers and riders who are not signing up for our products to see the value in what we are offering.

When targeting intermediate and advanced skiers and riders, it's important to offer products that function differently than introductory lessons. At Canyons, we took a look at our strengths as they relate to our terrain, upper-level instructors, general snow conditions, infrastructure, and location. From these strengths, we made sure it is aligned well with existing parts of the snowsports industry. Since the ski and snowboard manufacturers have already laid out categories for equipment use, like Freestyle, All Mountain, Big Mountain, Powder, Carving, and Women-specific, it's easy to align our strengths to some of those existing equipment offerings.

For example, Canyons offers a variety of mountain experiences based on people's desire to be a part of different identities within the snow culture. Assembling groups that want to focus on freestyle, touring the groomers, off-piste exploration, intro to bumps, powder hunting, teen-specific camps, women-specific skiing and socializing, or skiing and riding with famous Olympians has allowed us to capture more accomplished skiers and riders who don't want to take a "lesson."

By pushing people just outside of their comfort zone it allows for teaching moments that will challenge them to progress through the help of our instructors. The instructor essentially becomes their personal coach that gives them tactics or technique tips to be accomplished in their desired environment. We are not reinventing the wheel, but we are staying relevant to the other factors that affect people's goals and motivations while enjoying our mountain culture.

Dann Coffey

ROBIN BARNES, PSIA Alpine Team Member

We are offering Peak Performance camps at Heavenly to attract more experienced skiers and riders. These camps are three-and five-day sessions designed to be personalized, small-group learning experiences with our top instructors. The camps are marketed using our "headliners" at Heavenly—including PSIA-AASI Team Members Michael Rogan, Heidi Ettlinger, and myself, and (former AASI Team Member) Josh Spoelstra on the snowboard side. Capitalizing on the fact that we have current and former national team members, we try to tap into the market of upper-level skiers who may be attracted to this special camp but may not think that a traditional lesson is for them. We also have discounted lesson pricing for passholders to try to attract them to join us on the hill.

In Portillo, Chile, we're offering an exciting ski week called the Insiders Camp for advanced and expert skiers. Portillo is a special place that reeks of tradition and local lore. The camp is designed to make participants feel like they have a "backstage pass" to Portillo's offerings—both the personalities behind the tradition as well as the operations side of things that makes the place tick. Since we have some of the best *profes* (instructors) from around the world, the guests will be treated to really great instruction as well as an insider's experience in Portillo.

There are heaps of new-technology skis out there (rocker, early rise, etc.). And, just like traditional camber skis, there are nuances with technique and on-hill tactics that will capitalize on the built-in features of equipment. Advanced skiers and riders can benefit from the experience of coaches in upper-level lessons in learning

- the best exposures at any given time of day at a given resort;
- how to "read" snow and other variables and alter descents based on that read;
- tactical approaches to bumps, steeps, pow, etc., and
- technique customized to an individual's goals, equipment, and skiing style.

Dann Coffey

LANE CLEGG, AASI Snowboard Team Coach

In the snowboarding world, getting expert riders to take lessons has been a challenge since day one. Coming over from skiing, where there seemed to be lots of skiers searching for that elusive "perfect technique," snowboarders have always had the attitude about doing it themselves. I certainly was that way. Even if lessons had been available, I don't know that I would have taken them. And back when we started teaching, there were more people learning on their own than we had in lessons many days.

Even as the sport has matured, people (for whatever reason) tend to look to lessons only to get them started and then sort it out on their own. The accepted belief for many schools is to hold onto snowboarders until they can turn and then they lose them. I would argue that this is okay as long as they remain participants in the sport. The schools have done a good job if they have created a new lifelong participant.

Another aspect of snowboarding that we always embraced is the freeform of the sport. Initially, there was no correct

BY PUSHING PEOPLE JUST **OUTSIDE OF THEIR COMFORT ZONE** IT ALLOWS FOR TEACHING **MOMENTS THAT WILL CHALLENGE THEM** TO PROGRESS THROUGH THE HELP OF OUR INSTRUCTORS.

—ERIC ROLLS

way to ride—if you were riding, you were doing it right. As the sport evolved, we started defining movements that were more and less efficient (read: good and bad). But even so, we have worked very hard not to intrude into the realm of "style." Each person looks a bit different and we celebrate those differences.

But at the same time, I think more proficient riders see lessons as someone telling them how they should ride (and, more important, how they should look) and this is viewed unfavorably. I often hear that as a reason not to take lessons.

Despite these challenges, there are some success stories out there in regard to upper-level lessons. Freestyle is an area where people feel intimidated by the features and often look to instructors or coaches to help them past these fears. It's much the same way that other types of challenging terrain—including steeps, powder, and backcountry—can draw experts into lessons. Many resorts have created successful programs to address these needs, whether it be a daily offering (freestyle-specific lessons, backcountry guiding) or more of a "camp" format where they bring in interested riders for a specific event. Another successful formula has been to look at certain populations (i.e., women, older riders) and create offerings specifically to meet those groups.

Another growing area in the sport is coaching towards competition. There has been some interest in expert riders either returning to competition or beginning for the first time as a way to challenge themselves. This group doesn't seem to be limited to specific ages—certainly there are plenty of 12-year-olds out there who are training for competition, but quite a few older athletes in their 20s and 30s are enjoying the challenge of training toward a competition. I think this mimics sports like running, bike racing, and triathlon where people may want more of a challenge than just doing something for "fun."


Dann Coffey

KELLY COFFEY,
PSIA Alpine Team
Freestyle Specialist

From a ski school perspective, I find camps work well to attract experts—freestyle camps, race camps, all-terrain camps. They send a signal that the school offers more than just lessons for beginners. Even if those camps are only offered at certain times of the year, it gives the ski school the opportunity to advertise those special products all year long with the hope that more advanced guests will understand that lessons are still relevant to them.

In the kids world, season-long products like a local development team works great. At Breckenridge, we offer

"Bombers" for all ability levels of kids. Because the kids come every weekend and ride with the same team and coach, it changes the dynamic beyond a standard lesson. We get great feedback from the kids, parents, and instructors. This year we extended that program to include an upper-level Breck All-Mountain Team. This is a season-long program that allows advanced kids to dip their toes into the competition side of bumps, race, freestyle, and big mountain skiing and riding.

From the instructor point of view, I've found the pros who are most successful with staying relevant to experts are the ones who can identify and manage a wide range of motivations. Guests at the expert level tend to want to improve their skiing or riding toward a specific outcome. That outcome might be to feel comfortable in the halfpipe, zipper line down the mountain's most difficult bump run, carve a turn like Ted Ligety, or just get the local scoop on the mountain's best lines.

Then there's also the range of equipment that experts show up to lessons with, from rockered powder boards to twin-tip park skis to slalom-style carving skis. Pros need to be able to blend their guests' specific motivations with the equipment the guest showed up with and deliver a product that takes them toward their goals. The pros who are the best at figuring out the true "why" a guest bought a lesson are the ones who finish the day with ear-to-ear grins on all their students' faces.

Dann Coffey

TONY MACRI, AASI Snowboard Team Member

I find, particularly in Colorado, that people who are looking for the higher-level lessons and or coaching experiences are looking for something out of the ordinary. In other words, they are looking for something other than the traditional group lesson and tend to go for the long-term private experience. This normally is more than just a lesson, and tends to be more of a relationship-building experience with a possible lifetime friend/coach.

Most pros who have been teaching for a few years in Colorado—especially at the bigger resorts—definitely have a few of these. These people have been known to become even more than just a ski client/friend, and often an adventure buddy; sharing other activities such as mountain biking, climbing, and fly-fishing have also been known to take place.

However, some people are seeking elite development. In this situation, they are looking more for the camp setup. These can range from race or freestyle, to steeps, or general improvement camps. The latest option that has grown in interest is instructor training camps such as Snow Trainers. This is a season-long camp that offers accommodation, four days of training, a season pass, and indoor evening video analysis sessions, among other extras. The attendees will often take their different levels of certification exams through PSIA-AASI at the end of the course.

The really interesting part of all this is that not all the participants taking these camps are interested in becoming instructors. However most of them love the idea of having a certification process at the end of their course that offers a true sense of accomplishment. On the other hand, some people do want to become instructors. This has become especially popular among those people who want an escape from the corporate world. It also offers a great option for those coming from overseas who want to stay for the whole season.

Megan Harvey

KATIE ERTL, Ski & Snowboard Schools Managing Director | Aspen Skiing Company

To reach experts, we offer Highland Bowl tours that can be for a group lesson or a private. The idea is for guests to experience the Bowl with the guidance of a pro and learn about aspects, pacing, and getting tips on some of our steepest terrain.

We also offer All Mountain Terrain training at the Highlands, which is a clinic/lesson that focuses on situational and tactical approaches to expert improvement. In addition to that, there is Tache Racing at Highlands with an emphasis on race disciplines, video analysis, and tactical terrain selection so that skiers can come race and train all-mountain to become a better skier.

Starting at Snowmass there is a Double Diamond Expedition that travels the three mountains with double black terrain—moving a skier from black to double black. There are also Steep Teen Camps offered at Snowmass for teens who want to continue to get better in steep and off-piste terrain.

Dann Coffey

MIKE HAFER, PSIA Alpine Team Member

I once asked an expert skier why she didn't take lessons. Her response was, "Why should I when I can already ski the entire mountain?" Her statement is, in reality, a fact. This response would explain why so many experts opt out on developing their skills. So what can ski and snowboard schools do to entice other highly skilled individuals to take a lesson? From a program development aspect, at Northstar we approach it from three angles: Adventure, Guiding, and Learning to create an attractive package.

The adventure angle covers a wide variety of goals and outcomes. These outings may include the exploration of our

I ONCE ASKED AN EXPERT SKIER WHY SHE DIDN'T TAKE LESSONS. HER RESPONSE WAS, "WHY SHOULD I WHEN I CAN ALREADY **SKI THE ENTIRE MOUNTAIN?" SO MANY EXPERTS OPT OUT ON DEVELOPING THEIR SKILLS.**

—MIKE HAFER

"gated terrain," which is the sidecountry experience at the resort. The terrain is steep and gladed without any easy way out. The adventure may also include some time in a racecourse to test the most skilled athlete. Some tips or coaching may occur to make the adventure more enjoyable.

The guiding aspect offers someone the comfort and security that guests request in order to view the mountain from a local's perspective. This is the most efficient way to move around the mountain. The guest will have the opportunity to experience the local's favorite runs or hidden stashes. Some participants may utilize this product as a way to gain access to the highly desired lift line privileges.

Then there is the option of a traditional lesson in the learning segment. The lesson format will hone skills in a logical, progressive manner. The offerings are available in three tiers: a one-on-one or private lesson, an "Ultimate 4" setting with a maximum of four participants per lesson, or a traditional lesson format that may have 8 to 10 per instructor.

Lastly, the Burton Academy offers a one-of-a-kind experience in the lifestyle of snowboarding. The Academy creates an environment that's conducive to promoting the culture of snowboarding in the lesson experience. This is a true total immersion program.

The guest's time is invaluable, and therefore they look for a lifelong experience to take away from their stay. The variety of offerings allows the expert skier to create a unique resort experience. 32°

Peter Kray is the lead content officer for PSIA-AASI, responsible for overseeing the editorial content for the association's multiple media platforms, including 32 Degrees, *TheSnowPros.org, PSIA-AASI in Twitter, and the PSIA-AASI and Go With a Pro Facebook pages.*

WHETHER YOUR GEAR OF CHOICE IS TELE, ALPINE, OR SNOWBOARD, YOUR CLIENT POOL BROADENS WHEN YOU HAVE THE CHOPS TO EXPERTLY NEGOTIATE ALL YOUR MOUNTAIN CAN OFFER.

Jack Ballard

BEING AN EXPERT

MAKING THE JUMP TO FULL-TIME SNOW PRO

BY LISA DENSMORE

GUESTS KNEW EACH OTHER. THEY KNEW THE SKI INSTRUCTOR. THEY'D OFTEN COME BACK YEAR AFTER YEAR AND ASK FOR THE SAME SKI INSTRUCTOR. IT WAS ONE BIG FAMILY.

—John Litchfield, Co-founder, Aspen Ski Schools (1945); Director, Sun Valley Ski School (1950) from the film, *Passion for Snow*

I thought my destiny was international banking. In the fall of 1983, with my newly minted economics degree from Dartmouth College, I entered an account officer training program at a large multi-national bank in New York City. My skis gathered dust in my Manhattan apartment while my brain filled with debits, credits, and cash flow reports. Then the phone rang.

"Come to Okemo [Vermont] this weekend for the pro race," said Kim Reichhelm, a ski racing pal who had joined the Women's Pro Ski Tour after college, "We can hang out together."

It was mid-March. I hadn't skied a day all winter. Why not?

On a whim, I entered the race, a dual giant slalom. Though I didn't get past the first round, I returned to New York with $250 in my pocket and a serious case of the ski-bug. Three decades later, the bank and the Women's Pro Ski Tour are both long gone, but I'm still a professional skier.

The racing route into full-time professional skiing is one of many possible paths, and a low-odds one at that. Like many other athletes, years of training for competition made me an expert skier, and going fast paid the bills during my six years on the pro tour. It helped that I could speak and demonstrate skiing in front of a camera, but those opportunities were transient. Most top ski racers, freestylers, and freeride stars earn a living on the slopes for a year or two, or maybe a decade, through prize money, product endorsements, and personal appearances. Most of my peers have moved on, but I'm still making a living on the slopes at age 51. The secret to sustaining my professional skiing career has been my ability to teach.

If you're a new or part-time instructor who's thinking of making this a full-time gig, you should know that earning a livelihood as a ski or snowboard instructor takes more than simply putting on a uniform—especially if you want the trappings of a "real life," such as a home, a car, a family, and some money in the bank. While you won't make millions as a full-time ski instructor, you can be rich in friendships and experiences and have a comfortable, healthy lifestyle that's the envy of those Wall Street bankers who take lessons from you.

Jack Ballard

ONGOING REINFORCEMENT OF A TECHNICAL OR TACTICAL FIX HELPS MAKE FOR MORE EFFECTIVE LESSONS.

THE DECISION

The first step toward becoming a full-time instructor is committing to the idea. It's not an easy decision. Before quitting your current day job, think about why you want to take this career path. It's not enough to love skiing or snowboarding. Certainly that's an important reason, but equally important is a love of helping others improve their performance on the slopes. If you already have a taste of that as a part-timer and want more, that's a good sign.

One reality of full-time teaching is that you'll have little free time to ski just for the fun of it. You may spend most of a powder day digging a skier out of successive piles of snow on the beginner slope rather than floating weightlessly down your favorite chute. A client may want to ski all day even though it's ten below zero with a 25-mile-per-hour wind. And your back may ache from skiing in the bumps for six hours with one class only to have your next class request a bump clinic. It may sound sexy to ski every day, but not every day is a perfect day on the hill, and you rarely get to play on the perfect ones. If you're okay with that, read on.

THE SKILLS

If you've got the passion, the next step is perfecting your skiing or snowboarding skills. Career instructors are competent on the slopes on all types of terrain and in all types of conditions. The better your ability, the more confidence your clients will have in you as a mentor. As a true expert skier, you'll attract a broad clientele who want to ski or ride like you.

The ability to be flexible about who you teach also gives you more options. Consider a quiet midweek afternoon with a limited number of guests looking for a lesson. One skier requests a private big-mountain clinic. If you're competent on the steeps, jumping off cornices, and powering through windblown crust, the odds are high that you'll get the assignment. Or maybe a harried mom wants someone to coach her 10-year-old to a NASTAR gold medal. If you know how to rip through gates, you get the kid. Mastering a wide repertoire on the hill opens up more teaching possibilities. The next trick is getting that freeride wannabe or racer-kid to come back for more.

Effective instructing that creates return clients has five key elements, which I call the "Five S's of Ski Teaching," outlined below. Personality plays a part, too. If you teach with a smile and an encouraging tone, your class will like you, return for more, and recommend you to others.

FIVE S's OF SKI TEACHING

1. **SINGLE IT OUT:** In many cases a client is doing a number of things wrong. The key is to figure out the main problem, not the symptoms.
2. **SOLVE IT:** Once you identify the main problem, you need to know how to fix it.
3. **SAY IT:** Next you need to explain the fix in an easy-to-understand manner. Be specific. If someone is sitting back, don't just say "get forward," tell the person how to get forward.
4. **SHOW IT:** Pretty straight-forward here; demonstrate how it's done.
5. **STRENGTHEN IT:** Keep reinforcing the fix until the client consistently conquers the problem.

ACT THE PART

My accountant gave me a valuable tip when I left the bank to become a full-time professional skier. He advised me simply to act the part. His advice was directed at the business side of my skiing career, though I took it to heart on the slopes as well.

I always put my best ski boot forward. Though a uniform helps standardize the appearance of every ski and snowboard teacher at a mountain, I take it further. I make sure my gear—not only my skis, boots, and bindings, but also my ski poles, helmet, and goggles—is current and in good shape, and my clothes under my uniform are clean and well-fitting. In other words, I look like a professional, not someone who rolled out of bed five minutes before lineup. That goes for my fitness too. Pardon my bluntness, but would you want to take a lesson in a sport that touts an active mountain lifestyle from an obese, unkempt teacher? Probably not. However, if you look like a professional who's proud of your work, your ski and snowboard school will likely assign you to more people, and those people will be eager to learn from you.

Acting the part on the business side is also important. In other words, if you want to be a successful snow pro, there's more to the job than teaching on the hill. For instance, helping students negotiate the rental experience helps set the scene for success before you ever get on snow.

PROMOTE YOURSELF

To be a successful ski or snowboard instructor, you have to build a pool of repeat customers. Certainly how you connect with your clients on the slopes is critical, but you can accelerate the process by tactfully marketing yourself, starting with business cards.

Lisa Densmore

THE ABILITY TO BE FLEXIBLE ABOUT WHO YOU TEACH—INCLUDING CHILDREN—HELPS GIVE YOU A GO-TO EDGE WHEN LESSONS ARE ASSIGNED.

Photos by Lisa Densmore

TO HELP BUILD A POOL OF REPEAT CLIENTS, TAKE STEPS TO PROMOTE YOURSELF—AND NEVER MISS AN OPPORTUNITY TO DEMONSTRATE TOP-NOTCH CUSTOMER SERVICE.

Your business cards should give your contact information, the mountain where you teach, your website if you have one, and your memberships and certifications in pertinent organizations such as PSIA-AASI. Carry them with you all the time and hand them out to every client, prospective client, manufacturer's rep, mountain employee, and anyone else who might either take a lesson from you or be in a position to recommend you to others. PSIA-AASI's national office provides *Tip of the Day Cards* for various disciplines—alpine, nordic, snowboarding, and park & pipe—in which you can place a business card and give to students at lesson's end. The cards are free, except for a shipping and handling fee, and can be ordered through the PSIA-AASI *Accessories Catalog* (available online at TheSnowPros.org).

Likewise, collect other people's contact information and stay in touch with them. You might send an occasional hello and a one-liner on the snow conditions, but in each correspondence always include an invitation to take another lesson. If you send a written note through the mail, consider using letterhead stationery which subliminally says, "I'm a professional." E-mail, Facebook, LinkedIn, and similar social media sites are also good ways to stay connected in a personable yet professional way, depending on the skier or rider. And some people prefer the phone, either hearing your voice or receiving a text message. As you say your farewell at the end of a lesson, ask your students their preferred way to stay in touch and use it.

If you like writing, consider starting a how-to column or tip-of-the-week with a local newspaper or magazine, or start a blog (perhaps in the PSIA-AASI Member Community accessed at TheSnowPros.org). If you speak well, see if your local television or radio station might be interested in having you host a regular on-air tip. The point is to get yourself out there. Gear suppliers like it too. If you add a media gig to your resume, you'll get more lesson requests and potentially a sponsorship or two.

Jack Ballard

BANKING ON SKILL AND PASSION, AUTHOR LISA DENSMORE FOLLOWED A CAREER ROUTE FROM RACE LINES TO SKI SCHOOL LINEUP.

THE PLACE

As with any business pursuit, the mantra "location, location, location" holds true for snow pros. Where you teach can greatly influence how much money you make. Major destination resorts hire the most instructors, usually pay the best because they charge more per lesson, have more possibilities for advancement and, most important, have a lot of guests. That said, the cost of living in most major resorts can neutralize these advantages. Before you move to Squaw Valley or Vail, analyze whether you can afford to live there based on your potential earnings.

Over the years, my women's ski clinics have generally had better attendance at ski areas that are close to population centers. Thunder Ridge (Patterson, New York) and Wachusett Mountain (Princeton, Massachusetts) may not sound as glamorous as Snowbird or Jackson Hole, but there are literally millions of people within an hour or two of these regional ski areas. Housing, food, gas for your car, and other necessities are cheaper near day-trip ski areas. They're worth a look if your goal is to earn a living on snow.

Also keep in mind that even the busiest ski areas operate only about five months per year, from mid-November to mid-April. Most ski and snowboard instructors need counter-seasonal jobs to pay the bills when the ground is green. You can remain on snow year-round, though it will likely require having a second "home mountain" in South America, New Zealand, or Australia.

HIDDEN EXPENSES

Before you make the jump to full-time ski or snowboard instructor, understand that although you will likely be an employee of the mountain where you work, you are effectively starting your own business. It may take time to turn a profit. As a rule of thumb, most new businesses take at least two years to make money. In the meantime, you'll have expenses, including the printing of those business cards and that letterhead stationery, ski gear, a computer, and whatever else you need to do your job in a professional manner.

Though the IRS allows you to deduct these outlays as non-reimbursable business expenses, you still need to foot the bills. On the bright side, if you have a home-office, you can deduct a portion of your home expenses, as well as your cell phone, bootfitting fees, car mileage if the trip is ski-related (except for your daily commute to the mountain), the costs for higher-level certifications, and anything else that's related to your work. (Check with your tax advisor and IRS publications to determine if you qualify.)

Look closely at these expenses compared to your potential income to see what your true earning potential will be. If you project a shortfall as you get your new snow-career underway, your stress level will be much less if you've saved enough money to cover this start-up phase. And if you do make the jump, be sure to keep close track of these expenses so you can take advantage of them tax-wise.

Being a full-time ski or snowboard instructor can be a tremendously rewarding experience—even if the profession isn't likely to appear on *Forbes* list of the "Best Paying Jobs in America." If you've got the passion, with some forethought, skill, and professionalism—the hallmarks of a well-rounded, sought-after instructor—you can have a successful, fulfilling career doing the thing you love. 32°

A former member of the U.S. Ski Team and four-time World Masters champion, Lisa Densmore has skied professionally since 1985. More than 5,000 women have attended her women's ski events nationwide. For more information, go to LisaDensmore.com.

BE A SKI OR SNOWBOARD INSTRUCTOR

Whether you or someone you know wants to be a full-time or a part-timer ski or snowboard instructor, PSIA-AASI's educational resources and training opportunities will provide the requisite knowledge and skills. And available certifications will substantiate your professionalism. You'll also find a helpful network to help you launch and sustain your career. A great starting point in a quest to uncover the many possibilities is PSIA-AASI's website, TheSnowPros.org, where you'll find information on the many things your membership in PSIA-AASI can provide, including:

- Up-to-date resources—including the *Movement Matrix* (an online resource with more than 300 video clips of technique and teaching tactics for alpine, snowboard, nordic, tele, and adaptive instruction) and *32 Degrees*; as well as manuals, handbooks, e-Learning resources, and other education materials— for teaching skiers and snowboarders of every age, ability, on-snow discipline, and special interest.
- On-snow programs and clinics to improve your skills and acquire new ones.
- Current technique and terminology and how to communicate it.
- Certifications and workshops to boost your knowledge and skill sets, as well as help you gain peer recognition of your skills.
- Public and private forums, both online (e.g., on Facebook, Twitter, and the PSIA-AASI Member Community) and on-snow (e.g., National Academy as well as division events), in which you can connect with peers and mentors socially and professionally. *—LD*

TYPICAL CAR BUYING EXPERIENCE

DO LARGE AMOUNTS OF RESEARCH **AND** PRACTICE CAR SALESMEN AVOIDANCE TECHNIQUES

Rush Out To Car Lots **AND**

SIT THROUGH CAR SALESMAN CAR OPTIONS SPIEL.

TEST DRIVE

AND

NEGOTIATE

With Salesperson.

&

GO THROUGH FINANCING OPTIONS,
WRANGLE FINAL PRICE AND INTEREST RATE

ENDURE DEALER

AND *Haggling* **&**

INSPECT NEW CAR TO MAKE SURE IT IS WHAT YOU BOUGHT.

FINALLY!

YOU OWN A NEW CAR.

SUPER VIP

SUBARU BUYING EXPERIENCE

LOG IN AT THESNOWPROS.ORG

(GO TO PRO OFFERS)
Complete
SUBARU VIP FORM

PICK UP SUBARU

VENTURE TO CLOSEST
UNTAIN

PROFESSIONAL SKI INSTRUCTORS OF AMERICA

AMERICAN ASSOCIATION OF SNOWBOARD INSTRUCTORS

SUBARU

THE ROAD TO A NEW SUBARU IS BUMP-FREE. Thanks to your PSIA-AASI membership, you could save up to $3,300 when you buy or lease any new, unused Subaru at our special VIP pricing. That could mean a savings of $1,300 – $3,300 off MSRP* (depending on model and accessories), plus any applicable incentives. Log in at TheSnowPros.org and click on the Pro Offers link at the bottom of the homepage. Or call the PSIA-AASI member services specialists at 303.987.9390 with any questions. Subaru and PSIA-AASI — it's a smooth ride ahead.

SnowSports 360

RECIPE FOR SUCCESS: SPICE UP YOUR PROGRESSIONS WITH "SAS-C SALT"

Text and photos by KEVIN JORDAN

Have you ever used a progression (or several) that worked really well with one student and failed miserably with another? Have you ever had to make up a progression on the spot and didn't know where to begin? Having a progression-building approach can help you feel confident in your lesson and truly focus on your students, versus trying to figure out what to teach and what not to teach. Plus, once you have a progression plan, you can make adjustments as necessary as the lesson unfolds.

Anyone can create a well thought out and well planned progression—and having an approach or starting point is infinitely better than staring blankly at your students in awkward silence. The progression-building tool of "SAS-C (pronounced sassy) SALT" can help, and, no, this is not an infomercial. Now, I know what you are thinking: "*Here we go again with another acronym!*" Well, in this world of OMG and LOL, acronyms are part of our daily lives. If acronyms are not your bag, focus instead on the concepts of progression on which the "SAS-C SALT" tool is based.

A progression, in simple terms, is a sequence or a series of related steps that increase in difficulty over time in order to help a student acquire a new skill, refine an existing skill, or apply a new or an existing skill. It involves development toward a destination or a more advanced state. For example, you might teach a student how to perform movements without equipment and then may add one ski before adding two skis. Or you teach students how to stand on their equipment before introducing motion. You may also introduce motion in the form of a straight line or linear motion before you have students work on turning or motion with direction. As long as the progression builds through related steps or a series of activities that increase in difficulty, your students will be more successful.

There is no right or wrong way to create a progression. But every successful progression does consist of two things: a series of progressively harder (or more complex) steps, and relevance to the student. The SAS-C piece of this tool—which encompasses static, active, simple, and complex activities—focuses on the movement pattern or skill development, refinement, or application steps of the progression. SAS-C represents "how" to do something. The SALT aspect focuses on the parameters for making the progression relevant to the student profile. In other words, SALT—which stands for skill, age, level, and theme/teaching for transfer—is the "who, what, and why." With these concepts, the ingredients are one part activities and one part pertinent factors, which give you a recipe for a creative and a relevant progression.

HOW TO GET SASSY

As mentioned, the SAS-C part is an acronym for the static, active, simple, and complex movements involved in a progression. In a **static** exercise, there is little or no forward movement. For example, learning how to stand in an athletic stance on flat terrain would be a static alpine skiing exercise. For the **active** activity you'll want to add

Get static! Break down movements into smaller steps so students can understand them more easily. (Remember to ask for permission before physically moving your students.)

Get active! After students have performed a static exercise, add a little motion. Some students are visual learners, so demonstrate from multiple vantage points.

some motion—a straight run with an emphasis on an athletic stance, for instance. To add a **simple** action, you could have students focus on turning to the right while maintaining an athletic stance. Next you could have them turn to the left. Finally, a **complex** activity applies all the movements or skills you want from your progression, and looks like the desired movement pattern.

At this stage, your students have practiced the simple activity of turning to the right while maintaining an athletic stance. They have also practiced turning to the left. Now they are ready to link a right and a left turn together, which, when mastered, will be the complex activity or application of linking turns.

For more advanced skiers and riders, the complex piece might be applying some new movement or skill that they developed during the static, active, and simple activities to help develop something specific—either a movement pattern or skill development. Depending on the student, you may also

decide to use each step, or you may skip over certain steps of the progression.

In particular, when you focus on skill refinement or application, you may choose to leave out the static step of a progression. In other words, you can progress your students through terrain by increasing the steepness of the trail they are skiing or snowboarding on. You could also play around with different turn shapes and sizes, as well as different speeds of turns to refine movement skills. As long as you start with a step that is "easy" and progress to another step that is "harder," you are helping set your students up for success.

Simplify it! Add some more motion and direction while guiding students' practice. You will be surprised how fast your students will catch on.

NOW ADD SOME SALT

Why do we create progressions? "When learning new movements, people move through three basic stages of development, which are . . . the initial, elementary, and mature stages" (See page 20 of PSIA-AASI's *Core Concepts for Snowsports Instructors* and Doug Fagel's article on page 50 of this issue of *32 Degrees*). In the initial stage, students rely on sensory information and coaching for learning a movement. Typically, they have to look at what body part they are moving. During the elementary stage, a student can perform a movement without looking at the body part, but must still think about what he or she is trying to do. When a student can perform the movement fluidly and automatically, without concentrating on it, he or she has reached the mature stage.

"Why are we doing this?" might be a question your students, especially kids, will ask when performing a progression. The second part of this progression-building tool focuses on the relevance to the students. It is up to you, the instructor, to determine what activities you are going to use in the progression. To help make your decisions easier, you can look to the SALT aspect, or the skill, age, level, and theme/teaching for transfer. Again, this part of the tool answers the "who, what, and why." The next ingredients are parameters that the student or students will offer up to help make your decisions easier. In other words, you don't have to make up this part on the fly, although you may have to make some decisions based upon what the students tell you.

Okay, so time to sprinkle in a dash of SALT, starting with **skill** by asking students what they want to work on. For example, you might have a group of ten-year-old boys who want to do all the jumps on the mountain. A logical skill to work on could be fore/aft pressure control through flexion and extension movements. However, you could also work on edging skills if the students are having trouble taking off with flat skis and landing with flat skis. You, the instructor, need to decide "what" primary skill to focus on.

The next step is determining the student's or students' **age**. Obviously, it's easy enough to just flat-out ask children their age, but also aim to discreetly ask the same information of your adult students. Models like Kohlberg's Moral Development and Piaget's Stages of Cognitive Development come into play here to help with your decision-making abilities. Thus, activities that you choose to use with a four-year-old will not work the same with a 14-year-old—or a 24-year-old for that matter. Knowing the age of your students will help frame how you present the information. It also helps you know "who" your students are.

Another part of the recipe encompasses the proficiency **level** the students have already achieved. When building a progression, this information helps you make sure the lesson plan is both age-appropriate and level-appropriate. For example, if you have a group of teenagers on their second day ever of snowboarding, you might not want to take them down the steepest bump run on your hill since this requires a higher skill level.

In order to determine the correct level for students, you must employ your movement analysis skills to identify what skills they currently possess. Knowing the level of your students helps you answer the questions of "what" you choose to do with them and "why."

The final parameter is **theme/teaching for transfer**. As instructors, we have a huge opportunity to create relevance for students when we use themes or teaching for transfer. In other words, by asking what your students' interests are you can shape your progression to relate it to what they know. For example, if your group consists of a bunch of soccer players, your progression could include weaving


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Introduce complexity. Take the movements from the progression and put them into your students' skiing/riding.

in and out of a line of poles or cones to mimic a ball-dribbling exercise. If your students are into music, you might develop a progression about timing or rhythm. The possibilities are endless, and all you have to do is ask the right questions: What are you interested in? What sports do you play? What do you want to get out of your lesson today? The trick is to keep asking questions until you find a relevant piece of information you can use to build the progression. This part of the tool answers the "why" you are doing this specific activity.

PUTTING IT ALL TOGETHER

The key elements are that a progression has multiple parts or movements and these movements increase in difficulty while relating back to your students. There are many ways to create a progression, so remember that a progression is just a sequence of events arranged in increasing difficulty in order to move toward a goal or a final destination.

Again, your progressions can teach skill acquisition, skill refinement, and skill application. It's your job as an instructor to take the student profile and the situation into account to determine the best pathway or stepping stones to get your student to his or her desired outcome. Each pathway might be different, but the destination will be the same.

It's worth mentioning that areas and divisions within PSIA-AASI might not use SAS-C, but rather use static, active, complex, whole; static, simple, active, complex/whole; or static, simple, complex, and freeride. All of these methods have some commonalities.

First, they all have four pieces to them. The first has very little motion associated with a movement. The next step has some linear motion added to it, either in a straight run (motion down the hill) or a traverse/garland (motion across the hill). The second step still focuses on the specific movement that was practiced in the static stage. The third step combines the two motions of downhill and across the hill, which increases the difficulty of the task/exercise through focused practice. The final step is the application piece. This is when you apply the specific skill or movement that you have highlighted in the static (no linear motion), active (linear motion), and simple (directional motion) stages back into "real" skiing and riding.

Skiing and riding are complex tasks in themselves, with many factors in terms of speed, direction, and forces. Depending on your students, you might go through all the steps of the progression or you may choose to skip a step (e.g., static) if you are focusing on skill refinement or application.

The next time you need to build a progression, experiment with SAS-C SALT and see what happens. Start with a static activity that then gets increasingly more difficult with added steps when introducing new movements or skills to students. Determine what age your students are, what level they are, what skill they want to work on, and relate your progression through a theme or teaching for transfer back to their interests. You'll find that you offer a more savory lesson experience when you add a little SAS-C SALT to your next lesson. 32°

You can have a lot of fun when you create an engaging progression.

Kevin Jordan is the children's coordinator at Aspen/Snowmass's Buttermilk Mountain. In the summer, Jordan is the Bike Snowmass downhill mountain biking coordinator. He is an alpine, children's specialist, and freestyle examiner for PSIA-AASI Rocky Mountain. When not on the slopes, he is writing for Examiner.com as the national ski instruction examiner and the Denver ski instruction examiner.

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SOW THE SEEDS OF BLOOM'S TAXONOMY ACROSS ALL DISCIPLINES

By **STACEY GERRISH**

In 1956, when educational psychologist Benjamin Bloom developed a way to assess how people gain and demonstrate knowledge, he likely didn't foresee that his taxonomy would make for better ski and snowboard instructors. While the levels of understanding he initially outlined have shifted slightly over the years, they continue to form a bedrock upon which instructors can gauge student understanding…and PSIA-AASI can evaluate instructors.

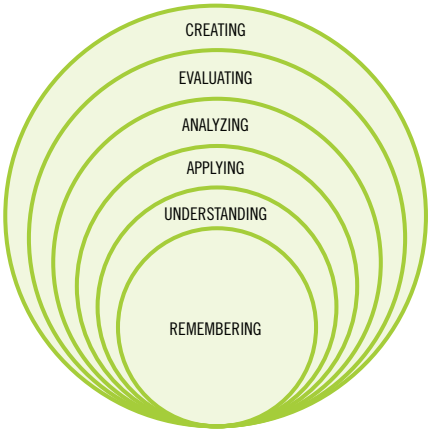
This was driven home at the PSIA-AASI Fall Conference held this past October at Copper Mountain, Colorado. Here, where representatives from PSIA-AASI's nine divisions gathered to establish a more consistent understanding of the association's credentials, the PSIA-AASI Children's Task Force (see sidebar) reaffirmed that Bloom's Taxonomy is an indispensable aspect of the association's Children's Specialist Standards. In fact, since the Children's Specialist 1 (CS 1) and Children's Specialist 2 (CS 2) credentials are multi-discipline, Bloom's Taxonomy could seamlessly apply across *all* PSIA-AASI certifications and credentials.

As a member of the task force, I've been fortunate to be involved as Bloom's Taxonomy became a primary component of our national standards for children's instruction in 2009. My own understanding and use of Bloom's Taxonomy has blossomed many times in recent years, and I firmly believe it has a valid role in our processes for teaching, exam and specialist preparation, and instructor evaluation.

When Bloom originally developed his taxonomy more than 50 years ago, his intent was to focus on three major domains of learning: cognitive, affective, and psychomotor. Despite the original intent, Bloom's Taxonomy applies only to acquiring knowledge in the cognitive domain. It was originally based upon the hierarchical elements of Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation, but because thinking implies *active* engagement, the terms were shifted from nouns to verbs and slightly re-ordered in the mid-1990s. Currently, the revised cognitive-process categories of Bloom's Taxonomy—or levels of understanding—are Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.

The categories are defined as:

- **Remembering** – Retrieving, recognizing, and recalling relevant knowledge from long-term memory.
- **Understanding** – Constructing meaning from oral, written, and graphic messages through interpreting, summarizing, inferring, and comparing.
- **Applying** – The ability to use or to develop existing information.
- **Analyzing** – The ability to break information into parts and to then build new information.



Stacey Gerrish

- **Evaluating** – Making judgments based on criteria and standards through checking and critiquing.
- **Creating** – Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through planning or producing.

In following Bloom's Taxonomy the learner moves from one category to the next once a category is mastered to full comprehension. The categories build upon themselves, such that in gaining knowledge a person first *remembers* relevant information, then *understands* it, and next is able to *apply* that information. Upon truly learning the information, he or she can *analyze* it, *evaluate* it, and, finally, *create* new knowledge based on what has been learned thus far.

In designing its Children's Specialist Standards, PSIA-AASI applied Bloom's Taxonomy as an evaluative tool, resulting in a consistent classification system to measure comprehension and

Grant Nakamura

Children's Task Force members huddle up at the 2012 Fall Conference.

maintain standards. While some educators favor Bloom's original terminology regarding levels of understanding, others prefer the action-based, modern language. The children's standards cite both, outlining cognition qualities of Remember (Knowledge Level) Understand (Comprehension Level), Apply (Application Level), Analyze (Analysis Level), Evaluate (Evaluation Level), and Create (Synthesis Level).

As outlined in the national standards (available on the "Be a Ski or Snowboard Instructor" page at TheSnowPros.org), the successful Children's Specialist 1 (CS1) participant will demonstrate *knowledge* and *comprehension* of the required technical terms, concepts, and models. For Children's Specialist 2 (CS 2), the successful participant will demonstrate the *application* and *analysis*, along with the ability to *synthesize* and *evaluate* the technical terms, concepts, and models.

Bloom believed that most people learn and comprehend the lower levels before they can effectively use the skills at the next level. In essence, as a learner moves through the levels of Bloom's Taxonomy, he or she goes through the phases of copy, choose, and create.

Initially, the learner memorizes information verbatim but doesn't fully understand it. Next, the learner can restate the information in his or her own words; that is, paraphrase, summarize, and translate. This leads to the ability to use the information to solve problems and transfer abstract ideas into practical situations and identify connections and how they apply.

Once this is mastered, the learner may identify components of the information and associated logic and semantics. Then, the person makes decisions with the learned information with supporting views and an understanding of the value of those views. Eventually, he or she combines information to form a unique idea using originality and creativity.

Across all disciplines of PSIA-AASI certifications and specialist credentials we evaluate participants' level of knowledge. The following examples are ones the Children's Task Force established during the Fall Conference, using Bloom's Taxonomy as the evaluative measure of knowledge and a base for consistency.

Example 1:
Measuring someone's level of knowledge of the teaching concept of "Play, Drill, Adventure, Summary, (PDAS)" within the six levels of Bloom's Taxonomy would look like this:

- **Remember** – Participant recalls parts of the PDAS cycle.
- **Understand** – Participant describes PDAS and can relate it to the Teaching Cycle.
- **Apply** – Participant uses the PDAS cycle for a variety of learning situations.
- **Analyze** – Participant distinguishes different parts of the cycle.
- **Evaluate** – Participant defends and makes decisions based on his or her knowledge of PDAS.
- **Create** – Participant constructs positive learning scenarios based on his or her knowledge of PDAS.

Example 2:
Measuring someone's understanding of the "Real vs. Ideal" movement analysis model within the six levels of Bloom's Taxonomy would look like this:

- **Remember** – Participant identifies and recalls real vs. ideal movements.
- **Understand** – Participant describes real vs. ideal movements.
- **Apply** – Participant demonstrates real vs. ideal movements.
- **Analyze** – Participant examines real vs. ideal movements.
- **Evaluate** – Participant judges real vs. ideal movements.
- **Create** – Participant designs new activities to coach the ideal vs. real movements.

For instance, a CS 2-qualified instructor would perhaps identify a child's real movements to include a lack of coordination or flexion in the ankle joint, putting the child's hips behind his feet. The child would then flex his torso forward to maintain balance over his feet. The ideal movement would include the ankles flexing evenly and in unison with the knees, hip, and spine.

Following Example #2, the instructor could design a creative activity to coach the child to flex his ankles—such as placing a small Ziploc® bag of mini marshmallows between the child's shin and boot cuff and asking him to do a "bouncy" movement throughout the turns (Thousand Bounces drill). The skis remain on the snow while the child bounces, his ankles flex, and the marshmallows are consequently flattened as the shin contact increases with the boot. Once the child masters this, the instructor could remove the bag of marshmallows and have the child do the drill again until he owns the new movement. The instructor and child could then enjoy the flat marshmallows (kept clean within the bag) during a hot cocoa break!

These examples highlight the usefulness of Bloom's levels of understanding—which are also addressed in PSIA-AASI's *Core Concepts for Snowsports Instructors*—in determining when a learner or participant has mastered information. Think of the six levels as a tool with which to check for and evaluate understanding.

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As a learner, the beauty of moving through Bloom's Taxonomy is that your ability and cognition depends upon your comprehension at the preceding levels. The ability to *create*—the highest level—is determined by your ability to *remember* the pertinent information, to *understand* that information, to *apply* it, *analyze* it, *evaluate* it, and, finally, be *creative* with it. In moving through all six levels you follow a cognitive process and achieve comprehension with a level of depth and "own" your knowledge.

As explained by Patti Olsen, a Children's Task Force member from Intermountain Division, when learning a new word, concept, sport, or a new maneuver in skiing or riding, a person first needs to understand or have knowledge about it, then remember or comprehend, and then use or apply what was learned. "Once we own this information—that is, truly understand it—we are able to take parts that apply to a situation, use it in a new way, and eventually decide the value of the information," she said.

"Bloom's Taxonomy is a great way to evaluate participants in the Children's Specialist Program—or any of our disciplines," Olsen added. "Through their participation, verbally and with activities, we can evaluate what they understand, remember, and use. If they truly understand and own the information, the participant will use a concept and may share a new application because they feel there is value and have seen the success."

Kim Petram, a Children's Task Force member from Northwest Division, agrees that the taxonomy is an effective model for concretely measuring how much a person knows about a particular topic. "It's like peeling back the layers of the onion," she said. "The outer layers are knowledge and comprehension and the inner layers get deeper into more thoughtful and precise levels of understanding."

When we use Bloom's Taxonomy, we allow each learner to follow their own individual cognitive process at their own individual rate while achieving a level of knowledge equivalent to our standards. The above chart incorporates Bloom's levels of understanding as a means to evaluate knowledge in a variety of the certification and specialist programs within PSIA-AASI. The green check mark indicates the minimal expected knowledge level for a successful participant based on Bloom's Taxonomy.

Sherri Harkin

The ability to apply information is an important component of learning.

	REMEMBER	UNDERSTAND	APPLY	ANALYZE	EVALUATE	CREATE
CS 1	✓	✓	✓			
CS 2	✓	✓	✓	✓	✓	✓
FS 1	✓	✓				
FS 2	✓	✓	✓			
FS 3	✓	✓	✓	✓	✓	✓
LEVEL I	✓	✓				
LEVEL II	✓	✓	✓			
LEVEL III	✓	✓	✓	✓	✓	✓

Clearly, Bloom's Taxonomy applies when measuring levels of comprehension. It's useful when instructors check for students' understanding and ownership of a task they've been working on. For example, if the instructor has been teaching a student to correct the timing of her pole swing and the student can repeat the directions as the instructor explained them, she is at the Remember phase. If she can additionally perform the improved timing of the pole swing and can point out when she's doing it correctly or incorrectly, the student is at the Apply phase. In addition, it helps create a framework for the questions you might ask a student during the course of a lesson. For example, "Susie, can you show me where in the turn you should swing your pole for correct timing?" And then, "Susie, can you point out someone on this hill who is swinging their pole at the incorrect time?"

Bloom's Taxonomy is also instrumental when an instructor is preparing for an exam or a specialist program. For example, if in preparation an instructor can remember and repeat back the Teaching Model, she is displaying comprehension at the Understand phase. But perhaps she needs to be at the Apply phase for the exam. If she checks her understanding against the phases of Bloom's Taxonomy she will know she needs further preparation. To reach the Apply phase in this example, the

instructor will need to cite how she uses the Teaching Model during a lesson. In each instance, Bloom's Taxonomy is an effective method and meter for determining proficiency and readiness.

Eastern Division's Sue Kramer, who led the Children's Task Force discussion of this topic at the Fall Conference, pointed out that while it's easy to be objective when evaluating ski technique—because you see what happens with ski performance—evaluating teaching in an exam format is more tricky.

"Because the actual student is not there, we never know just how effective the candidate's teaching is," she said. "At the very least, using Bloom's Taxonomy as a standard provides insight into the depth of knowledge in a subject—say, children, racing, or pedagogy—that a candidate brings to the table."

Given my experiences with Bloom's Taxonomy and the conclusions drawn at the Fall Conference, my thoughts are confirmed: Bloom's levels of understanding create a clear route for progressing from information recall to complex comprehension with a consistent system for measuring the progress. 32°

Stacey Gerrish is the training manager for Colorado's Beaver Creek Ski & Snowboard School and is a member of the Children's Educational Team and Committee in PSIA-AASI's Rocky Mountain Division. She is also that division's representative on the Children's Task Force.

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PSIA-AASI FALL CONFERENCE CHILDREN'S TASK FORCE ATTENDEES

Sue Kramer – PSIA-AASI Eastern Division (Group Leader)
Jill Imsand – PSIA-AASI Northern Rocky Mountain Division
Stacey Gerrish – PSIA-AASI Rocky Mountain Division
Carol Bickford – PSIA-AASI Northern Intermountain Division
Patti Olsen – PSIA-AASI Intermountain Division
Jeffra Clough – PSIA-AASI Alaska Division
Kim Petram – PSIA-AASI Northwest Division
Greg Lyons – PSIA-AASI Western Division
Grant Nakamura – PSIA-AASI Education Advisory Council Children's Chair

SnowSports 360

WHAT GOES INTO CREATING A STANDARD

By **EARL SALINE,** PSIA-AASI Professional Development Manager

Assessing to—and upholding—standards is a cornerstone of any quality certification or certificate program. Of course, before you can determine if someone meets the standard, those standards must first be developed and put into use. That's why, in October 2012, PSIA-AASI brought representatives from all nine divisions to Copper Mountain, Colorado, for a Fall Conference that would focus on reinforcing a consistent understanding of PSIA-AASI standards for all the association's nationally-recognized credentials.

Like a bill on its way to becoming a law, our standards go through a multi-faceted process before they become the measures by which professional ski and snowboard instructors are judged. Here's a rundown of the steps PSIA-AASI takes to assure fair and consistent standards.

ASSESS

To bring a new standard (and/or credential) forward, several pieces must be in place or known before starting development.

1. A proven need
2. A clear understanding of the part(s) of the instructor's job that the standard addresses
3. The domains, or areas of knowledge or skill, that the standard will address
4. The scope and depth of the knowledge, skills, and abilities within those domains
5. A clear understanding of where the "minimum bar" is for each level within the standard

Without clear answers to these critical areas, we run the risk of creating a standard or credential that has no value or credibility and one that doesn't serve the needs of our members, their employers, or our guests.

DRAFT

Through the development process, the second, third, and fourth points really come into focus. At different times throughout PSIA-AASI's history, standards may have been written by one person or several. Currently, we actively engage each division in the process of drafting and reviewing the standards. Representatives involved may be committee chairs, certification staff, PSIA-AASI Team members, or other subject matter experts from outside PSIA-AASI who know and understand the material inside and out. Also critical in developing standards are school directors because they have an intimate understanding of what they want their instructors to know and be able to do as they teach guests. From this range of knowledge and expertise, standards are drafted and reviewed.

REVIEW

In addition to the original group tasked with drafting the standards, representatives and stakeholders in the divisions and within the industry also review the standards. PSIA-AASI's national office strives to solicit the input of all the stakeholders that will be impacted by the standards. All of these steps are very consistent with the best practices of other standard-setting organizations. One stakeholder group that will be included in the future, beginning later this spring, is the public.

Grant Nakamura

This is a logical next step because, ultimately, the guest should perceive a benefit in taking a lesson with a certified pro.

APPROVAL AND ACCEPTANCE

Once the standards are at a stage where the feedback from the various stakeholders has been reviewed and incorporated, the divisions are polled to ensure the standards are acceptable and implementable within the division. From here, the standards are then put in front of the PSIA-AASI Board of Directors for its review and acceptance. If the standard is for a new credential, whether certification or a certificate program, the board adopts the new credential as a national credential.

IMPLEMENTATION

Throughout this process, divisions typically assess what it will take to put the new standard into practice. This may mean changes to an existing program or starting a new program from scratch. Regardless, the structure and format is meant to provide a fair assessment and uphold the standard without creating excess burden for members.

ONGOING REVIEW

Once the standard is put into practice, PSIA-AASI then goes into a cycle of regular review and re-acceptance by the board. The original taskforce members provide feedback that they gather from the stakeholders in their division based upon the successes and lessons learned. The feedback is evaluated and the standards updated where it makes sense and is applicable to all divisions. The amended standards are then submitted to the national board for approval and the cycle starts again.

CONCLUSION

Standards are living documents that must evolve as the industry involves. PSIA-AASI's national standards are used across all nine divisions to assess ski and snowboard instructors and grant them a nationally- and industry-recognized credential. Ensuring that these standards are up-to-date, consistently understood, and consistently interpreted was the foundation of the work done by the division representatives at the Fall Conference in October. The effects of the Fall Conference and regular review and update of the national standards will help PSIA-AASI ensure that the value of the credentials we offer is clear to you, your schools, and your guests.

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TAKING MOTOR DEVELOPMENT IN STAGES: INITIAL, ELEMENTARY, AND MATURE

By **DOUG FAGEL**

In any given snowboard lesson—and, really, any snowsports lesson—the instructor assesses the student's ability (or lack thereof) to perform certain movements. PSIA-AASI's *Core Concepts for Snowsports Instructors* includes a very simple concept that describes how a person's coordination of these movements develops in three stages: initial, elementary, and mature.

When AASI began developing revised, more comprehensive Snowboard Certification Standards in 2009, these stages of motor development were incorporated to more clearly define levels of mastering movements and indicate where they correspond to levels of certification. Applicable to all disciplines, this offers a roadmap for training to a set of specific movement skills and focused outcomes within our sports, which helps create a stronger foundation of understanding as we grow as educators. In other words, we can refine our methods through consistency as we educate, train, and certify our membership around the country.

Take a look, for instance, at how we develop and learn a new skill, maneuver, or trick. The first attempts may have some of the individual movements required for executing the desired outcome, but we lack the sequence of timing and motor control to actually be successful. With properly directed practice and repetition of each step, the body can start to home in on the timing of the movements. Over time, the sequence of movements can be coupled with the needed range of movement and exertion of energy. As the body develops the neuromuscular connections (i.e., muscle memory) for that specific skill, the mind can begin to redirect focus toward adapting to its surroundings rather than just the execution of the movements.

The development of neuromuscular connections and the application of new movements while standing still (stability), while moving (locomotor), and while controlling a piece of equipment (manipulative) is what we do as ski and snowboard educators. We connect people to an experience through movement and teach them how to develop skills that would not have been easily reached through independent trial-and-error processes.

Children develop as they progress through the initial, elementary, and mature stages of motor development. During this development, they learn different aspects of fundamental movement skills, including stability, locomotor, and manipulative. The initial stage of a child's motor development involves the ability to create the required movements, while still lacking the timing and stability to perform the goal effectively. As the activity progresses into the elementary stage, the child begins to sequence movements together while in motion. At the mature stage, the child has gained the knowledge, muscle awareness, and experience to achieve

Thrive Snowboards

Initial skill development

MUSCLE MEMORY:

Muscle memory refers to developing a specific motor task through repetition, such that the movement can eventually be performed without conscious effort. The nerve system creates stronger and familiar pathways from the muscles through the nervous system to the brain—therefore allowing a sequence of movements to be recalled from experience rather than having to think about each step of a skill.

the desired outcome consistently while adapting to changes in surroundings.

MOTOR DEVELOPMENT

There have been many studies done over the years based on the ability of a human to learn a new set of skills and for an athlete to develop a high level of performance within a sport. In 1967, Paul Fitts and Michael Posner presented their three stages of learning model in their book, *Human Performance.* Their theory highlighted a three-stage learning model for skill acquisition. These steps included the cognitive stage, associative stage, and autonomous stage. As an evolution of these theories, the Stages of Motor Development where released in a 2003 book called *Developmental Physical Education for All Children* by David Gallahue and Frances Cleland Donnely. This evolution of the concepts related to motor development applies to all snowsports disciplines within PSIA-AASI and was brought into the AASI standards to help describe proficiency and create consistency in our certification processes.

Let's take a deeper look into the stages of motor development and how we can utilize the previous works of Fitts and Posner to develop an increased level of understanding on the subject and its application within our sports.

Initial

The initial stage of motor development is the point where the movements and skills are just being introduced. This is the point of first instruction on how to sequence and time movements to generate a specific skill. The movements will tend to be over-exaggerated or restricted in range. It was first known as the cognitive stage due to the fact that the person had to consciously focus on each aspect of the movement or skill. (This is why you catch people looking down at their feet while learning to ride or ski.)

The execution lacks coordination, rhythm, and flow, which sometimes leads to missing components of a skill or movements not being effectively sequenced. The stability component of fundamental movement at the initial stage is very important in developing proper technique and to create a platform to progress to the other stages of development.

Elementary

Once someone starts to properly execute the required movements, and neuromuscular pathways have been developed, they enter the elementary stage of motor development. The skills and movements are being achieved consistently while improvements in performance levels are still being made. The use of coordinated movement for a specific skill—showing the ability to understand timing and movement ranges—is what helps solidify a skill at this elementary stage. With regard to equipment performance, at minimum a low level of manipulative performance must be shown. The individual must be able to isolate specific tasks and movements.

The associative component, at the elementary stage, relies upon knowing what skill or movement to apply as well as when and how to apply it. Competency in the skill at this level still requires a high level of concentration and focus, which at times can disrupt breathing and finite motor control. To continue advancement past the elementary stage requires at least some aspects of instruction, practice, and motivation.

Mature

At the mature stage of motor development, performing the skill has become second nature. The neuromuscular pathways have been developed to allow for efficiency in mechanics and motor control. Coordination of movements allows the ranges of movements to be blended together so that skills can be combined to create a fluid movement.

The ability to control and manipulate the equipment has been developed, showing precisely controlled performance. The movements or skill have become autonomous with the individual, making it seem almost automatic or habitual.

APPLICATION IN TEACHING

The initial, elementary, and mature stages of fundamental movement can be applied to any person learning a new movement-based skill—including a child learning to walk, a teen learning how to play a new sport, or a snowboarder or skier learning to do a new trick. When we are in tune with the three stages, we can more successfully guide our students to reach their goals and progress consistently. This can be a key component of understanding how to create drills, tasks, and activities that help to develop fundamental skills and serve as the building blocks for higher performance tricks and maneuvers.

Thrive Snowboards

Mature skill development in freeriding

Visualize learning how to ride through the trees on a powder day and the skills required for success. An individual needs to be able to manipulate their equipment to create a range of turn shapes and sizes while also being able to control and handle the fresh snow conditions.

When developing your plan for a group, you must also take into account that all people learn at different rates and some students will develop some aspect of their skills more quickly than others. By being in tune with each student's individual advancement, and where in the stages of motor development they are, you can better cater to their needs and skill levels. Be aware that if a student has only reached

an elementary level of proficiency they may not be ready for the next step.

USE IN CERTIFICATION STANDARDS

While specific terminology has only been incorporated into the national snowboard certifications—so far—initial, elementary, and mature stages of motor develop have broad applicability across all PSIA-AASI disciplines and student age levels. The ability to demonstrate a specific set of movements or to generate a specific performance based outcome can be more easily evaluated and more consistently tested by applying the specific guidelines for each stage of proficiency. If we look at the tasks and exercises required to reach the standards for each discipline at each level, we can apply the stage of motor development that must be achieved.

PSIA-AASI use stages of motor development to quantify the point in development for our students. Beyond AASI, there's the opportunity to do the same for certification participants in other disciplines. Proficiency of the movements in each level of a set of standards is based on the need to meet the requirements of either an elementary or mature stage of motor development.

In the first two levels of snowboard certification, an elementary level is required to be successful through the skiing/riding proficiency standards. At Level III you will see that the tasks are based on a strong ability to control and manipulate the equipment while also showing a mature level of motor development as you utilize a range of movement patterns to show similar outcome in performance.

As you look at your own skills and abilities, the use of the three stages of motor development can help you better understand where your skills are and where you might need to focus attention in your training. By realistically understanding this baseline, you can help maintain your current levels while training toward developing new connections to skills and levels of proficiency. Performance barriers are evident when the mature level is not reached with a skill that is needed to progress to a more complicated and challenging skill.

Thrive Snowboards

Mature skill development in freestyle

Strive to reach a mature level in all the required skills at each level of certification or accreditation. While an elementary proficiency is the requirement at some levels, be mindful that if you fail to develop your skills and proficiency levels to a mature level there will be holes in your skill set and movement foundation. As you expand your understanding and comprehension of the standards, be aware that each step should be refined in order to create the best platform to progress to the next level. 32°

Doug Fagel, is an AASI-certified Level III snowboard instructor who serves as the education chair for PSIA-AASI's Western Division. He is also president of Thrive Snowboards.

TRAINER'S CORNER

For those of you who are trainers, or looking to become trainers and eventually evaluators, you can use the stages of motor development to help create training exercises and programs to help promote success in your division and your home resort. By effectively evaluating the stage in motor development in a fellow instructor, trainers can identify the specific deficiencies in movement, execution, and timing.

These trainer's skills are honed over time, but even at the simplest levels peers can help share a guiding eye to what point of development an instructor has achieved. Remember, lack of quality training is what leads to plateaus and barriers in people's progressions. Never stop learning! —*DF*

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TEAM TIP

Dann Coffey

EXTRA EXTRA! Best Skiers Are In Twisted Relationships

By **ERIC LIPTON**

In my the last several years visiting ski schools and meeting pros, I've seen lots of good skiing among our PSIA membership—and a lot of good teaching too! One thing that stands out is that some of the best skiers seem to always be moving in and out of some pretty twisted relationships! You read that right.

Some of the very best skiing comes from those who can make their feet and legs do one thing, while their hips and shoulders do something else—all at the same time and within the same turn! The lower body (feet and legs) and the upper body (pelvis and shoulders) each have a distinct role in maintaining balance, and fostering the application of rotary, edge-control, and pressure-control movements. Good skiers understand this, and demonstrate it on the hill.

Let's look at the turn completion—where you are exiting the fall line—because that's the phase of the turn where skiers find it most difficult to keep the upper body and lower body doing their respective jobs. Fine-tuning that part of the turn will set you up for a smooth and successful start to the next turn. The opposite is also true—if things go wrong in turn completion, you'll have your work cut out for you to pull it back together for the next turn.

An all-too-common scenario that hampers a skier's ability to make accurate, rhythmic linked turns is when the upper body and lower body turn in unison. That is, when the whole body faces one direction and then the whole body turns and faces the other direction. This full-body rotation often leads to one of the following consequences.

CONSEQUENCE 1

Full-body rotation promotes a weakened stance, which causes excess flexion in the knee joint of the outside (downhill) leg, and little to no flexion in the ankle joint (photo 1). This combination moves the skier's center of mass back toward the tails of the skis. Unfortunately, this is just the moment in the turn when it's important to be *flexing actively in the ankle joint* and moving forward toward the tips of the skis.

CONSEQUENCE 2

Full-body rotation promotes bracing against the outside ski with little to no flexion of the joints in the outside (downhill) leg (photo 2). This is often accompanied with the whole body general leaning up the hill, at just the moment when it's important to be leaning the upper body *down* the hill toward the next turn.

Photo 1

Peter Schans

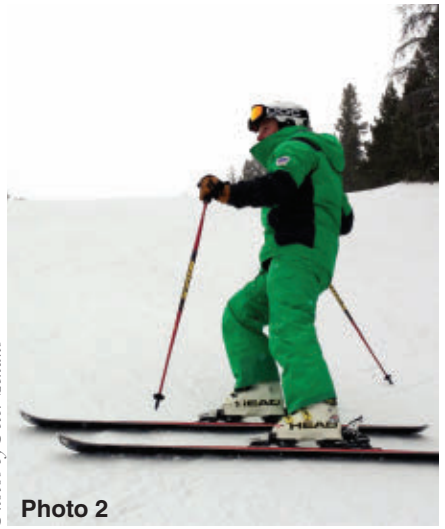


Photo 2


Photo 3

Photos by Peter Schans

GET TWISTED

For accurate, rhythmic skiing where one turn flows into the next, get into a *twisted relationship* between the upper and lower body as you ski out of the fall line.

Turn the skis with your feet and legs, with the major turning force coming from the femurs rotating inside your hip sockets. With this proficiency, the result should be that your pelvis and shoulders remain oriented down the hill at turn completion, just as they were in the fall line. Establishing this twisted upper-lower body relationship at turn completion will enhance balance against the outside ski and help to keep the center of mass moving with the feet, which sets up the skier for a successful entry to the next turn (photo 3). As the skier re-enters the fall line for the next turn, the body untwists. Only in the fall line should your upper body be facing the same direction as your ski tips.

Performing pivot slips in a corridor, hockey stops on your outside ski, and "J" turns (bull fighter turns) into the fall line are just a few ways you can practice this movement. With pivot slips and "J" turns, grab a partner and have him or her watch to be sure your legs are turning without your pelvis and shoulders turning too.

As you exit the fall line, don't let the upper body turn to face the same direction as the ski tips are pointing. Instead, join the myriad of good skiers on your hill today, and get yourself into some twisted relationships! 32°

Eric Lipton is a two-term member of the PSIA Alpine Team, and an examiner for PSIA-AASI's Eastern Division. He lives in Pennsylvania, and spends his winters visiting schools and PSIA-AASI divisions around the country, infusing the stoke for skiing.

Look Past Blind Spots to Forge a Personal Training Program

By **CHRIS FELLOWS**

If you're trying to maximize your performance as a well-rounded skier, you have certainly spent some hours training, mostly on snow. With the demands of the higher skill levels, and advances in equipment, new paradigms in training are beginning to develop.

Cathy Howard

Most top athletes—including the members of our own PSIA-AASI Teams—have adopted well-rounded conditioning routines that give them the needed fitness to perform at their highest levels while staying injury free all season long. Everyone from the first-year instructor to the journeyman coach can use the information gained from the functional movement assessment and exercises described here.

Getting the right answers always starts by asking the right questions, and the first question you should be asking is: "Is there is a piece to the ski-improvement puzzle that is right at my fingertips, but which is hidden by a self-imposed blind spot produced by years of compensatory movements?" For most of us, the answer is "yes," and it's more obvious than we realize.

Unfortunately this blind spot grows as we get comfortable with a faulty sequence of muscle movements that progressively become ingrained and eventually develop into the most comfortable way of moving. To a fault, I scrutinize my equipment when something doesn't feel right in my movement patterns. My default reaction is akin to automatically looking back for a crack in the sidewalk after I have stumbled while walking. In most cases, I don't find a flaw in the sidewalk. That reaction of looking for something other than my own clumsiness or lazy stride is nothing more than playing the blame game; I blame the sidewalk for my poor gait.

By identifying your blind spots, you will make more progress toward improvement than if you mask your faults with inefficient movements. Put another way, you can attain true improvement if you identify your personal blind spot and build an improvement plan based on your needs.

The process of systematically progressing to higher skill levels and sound body durability will require more than a diet of pure practice of technique. It's the same trap a first-time runner falls prey to. To get better at running, you run. But to *really* get better you should eat better, drink electrolytes, run intervals, stretch properly, work on your running gait, analyze your foot/running shoe interface, and regularly rest to allow your body to recover.

Should skiers be any different? To improve in skiing, you should go beyond the drill practice-only mentality and spend some time enhancing your functional movement with quality exercises—squats, lateral lunges, rotational stability exercises, and core

stabilizing drills—as well as improving your technique and tactics.

THE QUICK FIX ISN'T

A holistic approach to maximized skiing performance is always better than the quick-fix approach. But what is often overlooked in the holistic approach are the specific exercise blends that are unique to your sport, appropriate intensities for the training cycle you are in, and exercises exclusive to your physiological needs.

Many cities in the U.S. have ski conditioning classes, and some are more effective than others. Make sure your class isn't just training you to get good at trendy exercises. The focus should be preparation for the demands of real skiing. Any program worth its weight will assess its members' stability and mobility first, then teach developmental or corrective exercise movements, and then move to higher-intensity workouts.

A well thought-out training program can cut your training hours down significantly, and I outline here a basic template for improvement—designed for PSIA Alpine Team member Mike Hafer. (Your specific exercise needs, however, will change based on the results of personal assessments.) This template includes photos of a demanding ski improvement drill used by many ski pros and ski racing athletes, as well as descriptions of the three program phases and sample workout exercises demonstrated by Mike Hafer and a fellow Alpine Team member Heidi Ettlinger.

The accompanying photos of on-snow drills will give you an appreciation of the skill level modern-day skiers are striving for today. With higher speeds, greater angles, and repetitive ballistic movements, more skiers are bringing a wider movement range and greater fitness intensity to the ski slope. With new competency levels, skiers are naturally drawn to more challenging terrain, tougher conditions, and more remote locations within and outside the resort, and need to train specifically for that kind of skiing.

Equipment improvements have also helped drive an appetite for greater and more ambitious objectives. As the top skiers perfect their technique, common characteristics can be attributed to skill development, fitness, and functional movement. Hafer is a good example of someone who has spent time perfecting these aspects.

THE MOTIONS

The following sequence is a relatively advanced drill, but it can easily be modified to fit almost any skill level. The quickest way to modify it for a basic level is to keep all equipment on and just tap the tail of the inside ski on the snow several times through the arc and transition of the turns.

Photo 1: Ditch one ski and both poles and be prepared to feel like a beginner again. If you've never skied on one ski, keep all your equipment and practice the drill with one ski off the snow and hold your poles mid-shaft. Rhythm and flow in the fall line will be your best ally, and the goal is to gain confidence with the basic mechanics needed to edge, pressure, and turn one ski. Maintaining a strong core will help you maintain balance and facilitate movement with the legs.

Photo 2: With an accurate downhill projection, move your entire body over your ski and release the inside edge. Now you are able to steer the ski into the fall line and begin to engage your edges. In this frame you are seeing what coaches talk about when they say, "Commit to the turn." This commitment is the true crux of any turn. Notice the uphill side of the hip is high and moving forward. This supports your ability to maintain balance and early turning movements.

Photo 3: Now the edging and pressure movement continues to increase as you guide your skis through the desired arc. Notice that the skier has quickly balanced over the ski in an athletic stance. This athletic, balanced position will set the skier up for continuous and precise movements to finish the turn with control and flow.

Photo 4: Here, the precise movements have allowed the skier to stay in line with the ski, which is a much more efficient place when trying to make athletic adjustments and absorb terrain and conditions. Maintain a perpendicular relationship with the upper body and the slope to stay balanced through the finish of the turn.

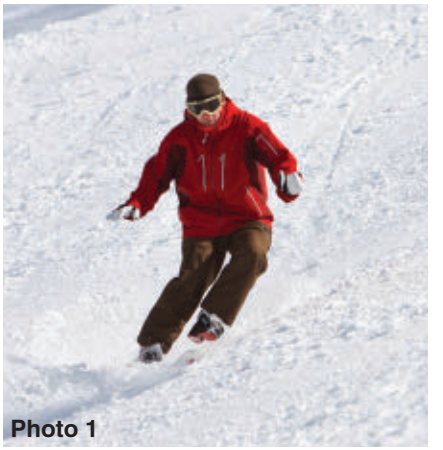


Photo 1


Photo 2

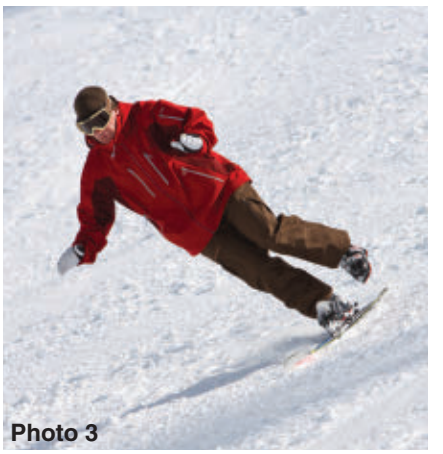


Photo 3


Photo 4

Photos by Jonathan Selkowitz

DON'T JUST DRILL, BABY DRILL

If you were looking for the quick fix—or a magic pill—you might think that this is the drill you need to practice. In most cases, it's the drill that really catches your attention first because it involves playing on the snow and that is where we all want to be. However, looking at the drill as the goal after several development steps is more realistic and will produce a more enjoyable process.

Jumping right to the drill is an example of the quick-fix mentality. To get the most out of this exercise and make noticeable changes in your technique, you should dig a little deeper.

As noted earlier, there is no one-size-fits-all solution when addressing your ski-specific needs. However, there are some general rules of thumb that anyone can take advantage of when laying out a personalized skiing training program.

The key point to remember is: Have your basic movement assessed by a professional trainer. I recommend the Functional Movement Screen developed by Gray Cook and Lee Burton (for more information, go to http://www.advanced-fitness-concepts.com/fms.pdf). Spend some time addressing the results of your screen; this could save valuable time over the duration of your training program and help you avoid injury.

Always warm up with a dynamic preparation, get your heart rate up, and get all your body parts moving. Building your motor with cardio-respiratory training or endurance fitness is most effective when you include training at three intensities, (low, medium, and maximum). Tracking your heart rate will help, as will noting perceived exertion. I recommend a scale of reference in which 1 represents walking slowly, with 10 being unbearable.

Strength and power training should focus on quality movement. As soon as quality technique falters it is time to back off on the weight, repetitions, or both.

Photos from Total Skiing, (2011), Human Kinetics Publishers, Champaign, IL

Trunk Stability

FUNCTIONAL MOVEMENT

Functional stability and mobility are the foundation that all fitness and technique should be built upon. Without attention to this important and essential piece of your program you are open to performance gaps or injury down the road.

Stability is the ability to keep one part of your body secure while stretching and contracting adjacent segments, which lets you manage your speed and maintain consistent posture throughout skiing turns. This is true body stability!

Mobility is created when muscles, joints, and tendons work together to coordinate your action. As one set of muscles contracts, another extends, and a third supports. Developing mobility engages these complementary groups and alerts your body that it's show time.

The Functional Movement Screen tests the body's ability to perform basic movement patterns on stable ground. The results of these tests will give you a starting point for addressing compensation areas.

By isolating the weak links, you will move toward identifying the root causes of your inability to perform functional movements, learning how the movement connects to your performance, and how to properly perform a specific technique. Many excited skiers rush right into these techniques on the slopes without noting key compensations and performance faults that can be determined from a functional-movement assessment.

To move out on the ski slope and expect to perform a challenging exercise well without training for stability and mobility would be a spin of the roulette wheel. That is why Hafer prepares in the gym before performing these types of exercises. Here, in three phases, is what he does:

Phase 1: Find Foundational Stability

Core stability and joint mobility in any sport will increase your ability to balance well in multiple planes. This is a huge component in alpine ski training because of the need for postural consistency in the presence of external changes or outside forces.

The foundation phase will last two to three weeks while you strengthen and coordinate your muscles for efficient balance adjustments that will result in the ability to precisely execute skills. The foundation phase builds motor learning and balance before the demands of the strength-building phase begins in phase 2.

Phase 2: Maintain Strength and Revisit Stability

The strength phase is needed to build multi-directional strength movement that includes hip mobility and strength, leg movement symmetry and strength, core front and back strength, and rotational strength. Lateral strength and pressure movements that are specific for skiing are the pathway to the beginning stages of phase 3.

Phase 3: Absolute Strength and Pattern Application

This phase represents the incorporation of all fitness facets and results in unguarded and simplified athletic movements. The blending of tuning-in exercises with the fundamental fitness established in the above phases will allow for a seamless transition from gym to snow.

THE HAFER APPROACH

As mentioned, you should build a personal training program based on your own needs. What follows is a template I designed for Hafer. His dryland sessions begin with a functional movement screen adapted from one developed by Cook and Burton. This is important for fleshing out all weaknesses and asymmetries in his movement patterns, and includes functional movement.

This test is made up of seven basic assessments: overhead squat, hurdle step, shoulder stability, lunge, leg raise, rotational stability, and push-up (again, see http://www.advanced-fitness-concepts.com/fms.pdf for more information). The assessment will establish a general movement baseline, making it easier to evaluate the specific areas where improvement is needed.

Strength, endurance, and power assessment will reveal the holes that could result in poor performance or injury. If muscular fitness and endurance is lacking, your *time* of work output will be limited or the *intensity* of output will be limited. This test will also preview your long-term durability and susceptibility to chronic injury.

Aerobic and anaerobic assessment will measure what the heart and lungs can handle during the workloads of skiing. The longer you are able to maintain higher workloads at lower heart rates and levels of perceived exertion, the higher your aerobic and anaerobic fitness levels are. This test will also measure how well your muscular system gets rid of the byproducts of intense activity.

Hafer's sessions over 12 weeks include a combination of corrective movement breakdown and "breakdown of movement prep." Preparation for any activity requires that you warm the body up by raising your core temperature and readying your nervous system.

These recommended exercises also help with balance, mobility and stability: Lunge to Knee Hug (six on each side), Lateral Lunge (six on each side), Drop Squat (six), Inverted Hamstrings (six on each leg), and Hand Walks (six with full arm extension). [Note: A Google search for any exercises or terms you're unfamiliar with will provide helpful details. I also reference many of these exercises in my book, *Total Skiing*, 2011, Human Kinetics Publishers.]

Next, he works on **glute activation**. If you have a job that involves sitting for long periods of time, you most likely have weak gluteus, tight hamstrings, and stiff

Lunge

Lateral Lunge

Lateral Lunge

Photos from Total Skiing, (2011), Human Kinetics Publishers, Champaign, IL

hip flexors. Glute activation counteracts the effect of long hours at your desk by engaging the muscles and connective tissue that atrophy as you type away. Ironically, these muscles and tendons are the primary movers for dynamic skiing. Hafer does four Mini Band Walks for 10 yards at a time; two times laterally, one time forward, and one time backwards.

Next up is **neural activation**, which helps prepare him for the unpredictable surfaces faced while skiing. Mixing up your movement patterns from your default moves tricks your body into learning how to change direction, intensity, and speed on the fly. Hafer uses Ladder Dissociation (in, in/out, out), an Out Ladder Drill, and an Icky Shuffle Ladder. These drills change every few weeks to challenge ingrained patterns.

Hafer then works on **strength**. Strong legs and core are essential for skiing, but to be able to perform well in the strength category you have to repeat muscular efforts over the length of a typical ski run. To perform at your top level you need muscular endurance and strength.

For an upper body focus, Hafer does the following exercises: Push-up with Stability Ball; Horizontal Row; Kneeling Single-Arm Row.

To strengthen his core, he opts for these exercises: Medicine Ball Toss with Sit-up, Medicine Ball Side Toss, and Hanging Leg Raise.

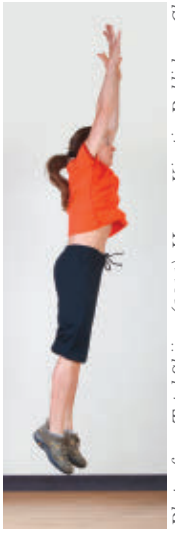
To work on his lower body, he performs these exercises: Split Squat, Lateral Lunge, and Romanian Dead Lift.

Next up in Hafer's dryland training regiment is **elasticity training**. In skiing we experience a unique combination of acceleration and deceleration in all planes, which is why elasticity or power training is so important. Power and elasticity exercises enhance your ability to store energy and then to use it to explode at will. To work on elasticity, Hafer performs the following exercises: Lateral Box Blast, Tuck Jump, Lateral Hurdle Jump.

The workout continues with **foam rolling and static stretching**. Recovery is a crucial part of training, yet it is often overlooked. In fact, recovery is an essential part of the muscle-building process.

Push-up with Stability Ball

Lateral Box Blast



Tuck Jump

Photos from Total Skiing, (2011), Human Kinetics Publishers, Champaign, IL

Foam rolling (that is, exercises performed on a foam roller) can help to relieve tension from the areas in your muscles and fascia that have knots and trigger points. It is also important for activating your fascia. Static stretching helps to maintain or even regain range of motion in your joints and length in your muscles and fascia. Together, these can help reduce the risk of overuse injury, and with on-hill performance resulting from improved mobility.

In this part of the regimen, Hafer does the following exercises: Myofacial Release, Adductor Release, Hamstring Release, Quadriceps Release, Iliotibial Band Release, Upper Back Release, Static-Stretching Hip Crossover, Butterfly Wall Sit, and Seated Rotation.

Of course, no workout would be complete without **cardio-respiratory training**. If your cardio-respiratory system is strong, you will have a bigger motor capable of doing a great deal of sport-specific work. Your body will need to provide energy stores for accomplishing

Medicine Ball Toss

Medicine Ball with Sit-up

Photos from Total Skiing, (2011). Human Kinetics Publishers, Champaign, IL

the intense muscle work required by the demands of skiing.

Having big muscles with no aerobic capacity is like having a truck with giant tires, but with only a lawnmower engine under the hood. To build both muscles and aerobic capacity, Hafer goes road cycling or mountain biking two to four times a week for more than 90 minutes a ride.

UNTIL THERE'S A PILL . . .

Until the day comes when we can take a pill that will magically transform us to have lightning-fast reflexes and the athleticism of the Greek god Hermes, we must trudge a more laborious, mortal-like path known as hard work. The process should be enjoyable, but is often frustrating and tiring with no end in sight. There is something to be gained through all this attention to detail that comes from studying the intricacies of skiing. What you gain from this process is more than skill improvement and a more aligned body; you will also gain experience and knowledge that you can pass on to others, and that is a true gift. 32°

Chris Fellows is the author of Total Skiing *and* Tactics for All Mountain Skiing *and is an alumnus of the PSIA Alpine Team. He offers special thanks to Mike Hafer, two-term Alpine Team member, and Marc Digesti, Director of PerformancEDU in Reno, Nevada, for their help with this article.*

Web Extra

Want to get a day-by-day rundown of Hafer's dryland training regimen? Check out the chart of his 12-week workout regimen by going to TheSnowPros.org, opening the "Publications, Videos & Resources," and, clicking on "Web Extras" in the drop-down menu for *32 Degrees*.

TEAM TIP

Dann Coffey

5 No-Frills Skills
Set the Pace

By **DAVID LAWRENCE**

New junior nordic coaches and beginning instructors often ask me for advice on what to teach and how to identify inefficiencies in their athletes' or students' skiing. After all, in the proverbial haystack there's so much hay it's hard to see that needle you're looking for!

It doesn't have to be this way. If you think of cross-country skiing in terms of five simple concepts, you'll be better prepared to set up your athletes and students for a "nordically" successful future!

Julie Shipman

On the first loop, drop your posture so you will ski a bit lower than usual.

BODY POSITIONING: SKATE AND CLASSIC

Think of a skier's body positioning as the fundamental building block of all skiing at all abilities. Without a good foundation, what we build on top might crumble and fall. Build the foundation strong and stable with these helpful tips. Try them out yourself, and then apply them in a lesson setting with students.

Make it a point to ski low, with flexed ankles and knees and rounded, slouchy shoulders. This low position shouldn't tax the legs too much. Make sure that you don't make a common mistake of getting too low by bending at the waist. When you are in this low, flexed position, ski a kilometer or two and see how it feels.

Next, keep the knees and ankles slightly flexed and stand taller, but don't go for straight legs and perfect posture. Keep your ankles and knees slightly bent, and shoulders rounded and slouchy. This body position supports efficient skiing, but is slightly less dynamic. Now go ski for a kilometer or two in this position.

These two positions give us options. That's why I call it body *positioning*, not body position. Body position sounds like one position—static. Body positioning sounds like a moving body that flexes and extends, and is dynamic.

Here's another important body positioning trick: combine the tall and small. For example, in V2, V2A, double poling, and even classic striding, it is important to get tall and small when we ski. Stand taller when you pole, and get smaller by flexing your legs and abs simultaneously during pole and ski compression.

These positioning moves give us a great range of motion and more options on the ski trails.

LEG EXTENSION FOR GLIDE: SKATE

Skate skiing seems magical to me. Unlike walking, running, or classic skiing, we

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don't push backwards to move forward. Instead, we push against the ski, moving the ski one way and our body another direction. Everything moves forward down the track, not backwards!

To feel this magical move, put your skis in a V and get into a flexed, low position with deep ankle and knee flexion. Keep your hips over your feet, extend your legs, and do the splits. Just before catastrophe—the splits going bad, if you know what I mean—bring your skis back underneath you and do it again.

Before long, you'll move down the trail, never once pushing backwards. Instead, by extending your leg and pushing your skis diagonally forward, you create a magical moment of glide. Now do this on one ski at a time.

What you have done is create glide by extending your leg to the side. "Extension glide" is the catchy, memorable phrase you can use to capture the sentiment—it's not necessarily accurate but offers a good description to guide practice.

WEIGHT TRANSFER

After you start to glide through leg extension, it's time to add some weight transfer. Not only will extending your leg sideways push the ski for glide, it can also push your hips, abs, shoulders, leg, and the new glide ski the opposite direction—forward and diagonally down the track.

If you catch yourself on the other ski, you'll carry momentum and glide. If you don't catch yourself I hope someone will film the results and post a viral video on Facebook.

Transferring yourself from ski to ski "completely" should get your nose, hip, and knee "almost" lined up over the ski, ready for balancing and gliding before you repeat the extension glide to push the ski—and to push you—back over onto the new ski.

Classic skiing requires the same skill, but extending your leg doesn't push the ski down the track—it pushes the ski into the track!

What? Yes, push the ski down to make the wax pocket bite into the snow, stopping the ski! With a ski stopped, stuck, and flattened, you have a platform to push off of. When you extend that leg, you better get off the ski quick so it doesn't slip. It is like skating as you go forward and diagonally down the track.

KICK

Since we're on the subject of pushing off the ski, let's talk about how we set the wax pocket and stop the ski in classic skiing. Although the term is misleading, we call this a "kick." As before, you'll need to stick, stop, and flatten the ski. Thankfully these things happen simultaneously. You make the ski flatten by getting all of your weight over the glide ski. Gravity and cheeseburgers help you out here.

Second, you have to stop the ski by giving it a quick impulse by flexing the ankle joint and knee quickly. That quick impulse is like standing on the scales and quickly spiking the reading to register twice your weight. Do it hard and fast to stop the ski and make it stick onto the snow.

The final bit is that you have to keep the ski stuck to the snow as you push off it. If your ski does slip backward you will need to get off that flattened, stopped, and stuck ski fast. Push off from the rear part of the ball of your foot rather than your toes. Think about trying to "impulse kick the ski" and move off the ski at the same time.

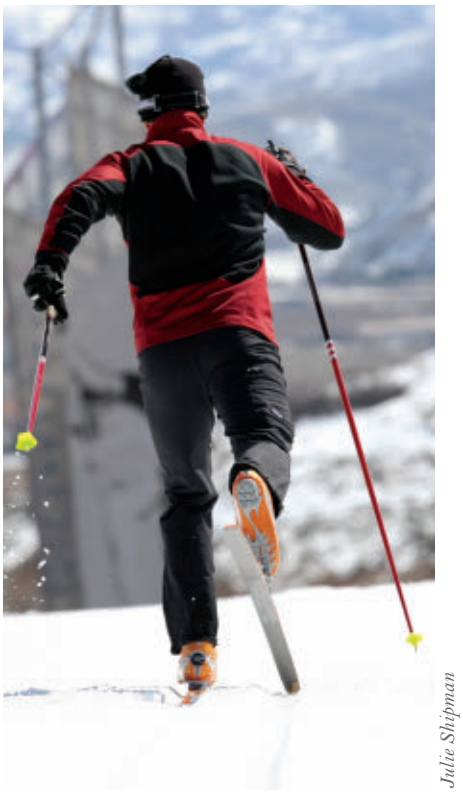
POLING

Here is where you'll need to blend body positioning, leg extension, weight transfer, and kick with your arms and poles. So let's think of poles as the trifecta of hands, arms, and ankles—as well as flexing abs. Start the poling trinity by focusing on your hands. Plant your poles with high hands in order to get your poles near vertical. Second, bend the arms enough to bring the poles close to the body so they can translate as much power from the body to the snow. Third, flex your abs and ankles—the mighty A's!—simultaneously as you start poling in order to deliver the maximum amount of power while resisting the hips to move backwards as the hands pass.

As St. Francis of Assisi said, "First do what is necessary, then what is possible. Soon you'll be doing the impossible."

Julie Shipman

Notice how the nose, hip, and knee align just before the move onto the opposite ski.



Julie Shipman

Focus on the three pieces coming together—high hands, arms, and ankles.

I think that applies to nordic skiing too. First, work on propulsion from the legs (what is necessary), then work on adding the poles to complement and enhance propulsion (what is possible). Finally you'll be doing the impossible, gliding effortlessly over miles and miles of trails, floating up hills. 32°

PSIA Nordic Team member David Lawrence lives in Winthrop, Washington, and teaches in the Methow Valley. His credentials include Children's Specialist 1, Telemark II, and Cross-Country III.

AN IMPRESSIVE VIEW.

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A Tale of Two Turns: When I Tele, and When I Alpine

By **J. SCOTT McGEE**

"Nobody cares that you tele." I got to thinking about the origins of that bumper sticker recently, and decided it must have been borne of telemark skiers' inevitable propensity to compare their skiing with that of alpine skiers—or their own alpine skiing.

Being able to ski terrain that alpine skiers do, and ski it as well, are among the rare instances when we tele skiers can regard our abilities as standing above the pithy put-downs we often endure, such as "Half a binding, half a brain," "Lock your heel, ski for real," or "Tele: Norwegian for faceplant."

But how many tele'ers make more "alpine," or parallel turns, than tele turns? And what makes a tele'er ski parallel?

WHY TELE?

Here's my story. I grew up alpine skiing on family trips out West from Tennessee. At 16, we moved to Utah, and my best friend cross-country skied. He wanted me to free the heel, and I wanted him to ride lifts. We compromised. When first I tele'ed (yes, like so many . . . self-taught), not making a parallel turn became the most important part of learning to tele.

The flexible leather boots didn't offer much support—in fact, not enough to even make parallel turns a viable backup plan. As my tele'ing got stronger, I took up racing. Telemark racing penalizes a parallel turn by adding a second to a racer's time for each infraction, so, while racing, the prospect of penalties also kept me from paralleling on pins.

I virtually *forgot* how to parallel. Alpine boots and skis felt alien when I skied them. I was a pinner to the core.

I was still early in my teaching career, and that's when I was going for my Telemark Level III certification. "Open Parallel" was one of the required maneuvers. As I recall, I squeaked by.

One day, while training for slalom a year or two later, I hooked a gate and my ski didn't release. But my ankle did. Just a sprain, but a pretty bad one. For a time thereafter, telemark turns put my trailing foot at risk, in powder, crud, and anything but pristine corduroy.

That's when I really re-learned to make parallel turns. I got better at alpine skiing too. I took PSIA alpine clinics on both tele and alpine skis. I got better at skiing with my heels down. I sought and achieved my Alpine Level II certification. At this point I could reasonably expect to make pretty decent alpine turns on my pins, especially now that tele equipment had grown so much more supportive and positive.

TO TELE OR NOT TO TELE

Between teaching and training, and wanting to be proficient in any technique on any equipment in any conditions, I aspired to higher performance turns in both tele and parallel turns. Being able to choose made a big difference. My use of tele turns has evolved to tele lessons and clinics, and conditions which challenge my fore-aft balance: crud, or cut up powder, grabby wet spring snow, breakable crust, etc.

Luca Diana Photography

Terrain of choice; cut-up powder that challenges fore-aft balance.

Luca Diana Photography

The author demonstrates higher edge angles in a tele carve.

Parallel is my turn of choice for pristine corduroy, untracked powder, or in situations when I want to turn it up. I also use it for recovery or, admittedly, when I'm tired. I can definitely say that the technical knowledge of both alpine and telemark have complemented each other, and have helped my skiing and my "teaching for transfer."

There are a few other reasons for rockin' tele gear in bounds. It's certainly easier to walk to the lift, and even easier than on alpine gear to skate there. For traversing, hiking, or sidestepping, tele gear reigns. For many, tele gear is about turning blue runs into black runs, about skiing with the kids instead of waiting for them, or about identifying with their cross-country roots, granola friends, or backcountry dreams.

So, while those are the reasons that guide *my* choice for which gear to use, or which turn to make, for other people they are completely reversed. Some friends of mine tele only on corduroy, or only tele in the perfect powder that backcountry can provide. Whatever *your* reason, intentionality seems to help form—especially for aspiring tele'ers. As I've told innumerable students, "If you start a turn in a tele, finish it that way. If you're on terrain you *can't* tele, tone it down and move back to the greens . . . or just parallel."

Whether you tele because you love the grace of it or the challenge it provides, or because you're in challenging snow or a tele race, or because you want to teach or get certified in Telemark, you can be comfortable in the knowledge that having the choice, turn to turn, to use one technique or another is what the freedom of the heels is all about. 32°

My use of tele turns has evolved to tele lessons and clinics, and conditions which challenge my fore-aft balance: crud, or cut up powder, grabby wet spring snow, breakable crust, etc.

J. Scott McGee is in his second term as coach of the PSIA Nordic Team and is the director of Wyoming's Snow King Mountain Sports School. A former telemark competitor, he now dreams of perfect corn on spring backcountry skate ski tours.

TEAM TIP

Dann Coffey

Team Tip: Be Inspired By a Legend

By **CHRIS HARGRAVE**

As proof, perhaps, that the universe *does* occasionally align, snowboarding legend Craig Kelly will be honored this April with posthumous induction into the U.S. Ski and Snowboard Hall of Fame. Kelly, often called the "Godfather of Freeriding," died in an avalanche in 2003 but his fluid style of riding continues to inspire.

I remember the first time I saw of video of Kelly. Watching him ride was like seeing a master painter apply perfect brushstrokes to a blank canvas. Granted, some may say his style was "classic" or "old school"—and he made an artistic rhythmical motion with his hands and arms that became an endearing aspect of his style—but there is no denying the power, grace, and skill of his riding. The movements he made were so far ahead of his time that, for years since, we have all nerded out finding ways to break them down and integrate them into high-end riding. There is so much to be learned from his amazing powder technique.

THE SLASH

Kelly—who won four world championships and three U.S. championships in the 1980s and '90s before leaving the professional circuit for the allure of backcountry riding—had a way of turning that was far more dynamic than any other rider of his time. He was able to accomplish this on equipment that most riders would be scared to use these days: a plank-like board, three-strap bindings, and a pair of super-soft boots that gave much less support than even the softest boots of today. Imagine the limited range of motion and the awkward pain riders endured to enjoy snowboarding back in that day. That said, it's not the equipment that limits the user; it's the limited creativity of the user to make the equipment move.

I was always entranced watching Kelly ride, and often wondered how he could create so much power in his turns. How did he slash pow like a robot sent from the future to destroy freshies?

Simple. Craig Kelly had a very natural sequence to his movements that grew more powerful as he built momentum and rhythm. I believe he accomplished this totally through intuitive feel, like most kinesthetic learners. It was obvious that he was feeling something amazing and hungered to repeat it in growing intensity.

Kelly's moves went a little like this: Get low, change edges, slash 'n' load, release, reset, repeat. Let me explain.

When starting down into a line, he would get low and dive into the turn. As energy built up, his move to reset and remain low was truly a retraction and a perfect use of the rebound energy building up in the board. Bent ankles, knees, and hips set him up for a great opportunity to power up the turn through leg extension.

Loading the board from nose to tail is the most important piece of what Kelly did. This is where he generated the energy that led to the amazing sensations of pressure building up and shaping a turn while defying the forces at work and staying in balance. Here is the key: as he extended his legs he also "shifted" or "slid" the board under his body from front foot to back foot, creating a powerful load-up of energy in the tail. This action is not a tilting of the spine or shift of the core over the board; rather, it's an efficient action of the legs driving the board forward relative to the core. As the tail loads you can see the most amazing slashing turns that throw up a huge rooster tail of pow! With his spine and upper-body disciplined, Kelly would build a platform of resistance that would set him up to do it all over again.

Resetting not only prepped him for the next slash but it also helped shape the finish of his turns. As he retracted his legs (lead leg first, then rear leg) his lead leg drew the nose toward the

Budfawcett.com

Craig Kelly, circa 1989

core and across the fall line. His board was drawn toward his core and quietly passed under as he committed his core into the next turn. Amazing!

Kelly created a perfect blend of body-over-board and board-under-body mechanics that led to a fluid, graceful turn transition. As riders, we can isolate our movement patterns to board-under-body, body-over-board, or a blend. Riders who blend in appropriate portions work with the terrain in the most fluid way.

With limited visual resources and feedback likely from his friends, I imagine that Kelly's self analysis came mostly through feel and the telling results of success and failure as he learned to conquer halfpipes, gnarly lines, and amazing mountains. He painted his canvas with sensational movement patterns without structured coaching or instruction, and long before our understanding of human performance in snowboarding led to some of the methodology we now use.

RIDE LIKE CRAIG

So, how do you apply Craig Kelly's style to your own riding (and share it with your students)? First, be low before making any moves toward the new edge. Move into the turn and roll the board over to the new edge. As that edge begins to engage, drive the board forward and extend the legs to pressure the edge and load the tail.

Let the energy build up and dig deep into the pow. Retract the lead leg, then the rear to release the built-up pressure and energy. Shift the board back under the core to reset. Feel amazing and repeat!

Here are some great drills to develop these skills in the flats or in the shred den at home, boots on and buckled in!

OLLIE

The best simulation of these mechanics in a linear path

1. Get low.
2. Shift your core slightly over the front foot.
3. Slide the board under your core and set up over the tail.
4. Make sure your shoulders are still level to the snow surface (or floor) or have the lead shoulder slightly tipped down.
5. Make sure that the lower half of the rear leg is tipped toward the tail.
6. Extend the rear leg and bend the tail.
7. Retract the lead leg and then the rear to release the loaded energy and get the board up.
8. Level the board out by bending your knees evenly and raising them up toward your core.
9. Extend your legs and stomp down.
10. Bend your ankles, knees, and hips to absorb the landing.

Photos by Wes Sherriff

These next two drills develop two of the key components of Craig Kelly's power in the slash.

SHRELP!

This refers to the skidding sound your board makes as you extend your legs to push the board away from your core.

1. Get low.
2. Put your hands on the snow/carpet and tip the board onto the toe edge.
3. Push both feet away from the core, scraping the edge along the snow/carpet.
4. Reset and repeat several times.

Photos by Matt Majerski

DRIVE

That is, move the board forward ahead of your core from foot to foot to help load the tail

1. Get low.
2. Place your back hand on the snow/carpet directly in front of your back foot on the toeside edge.
3. Drive and slide the board ahead of the core (like doing a tail press) while keeping it tipped onto the toe edge.
4. Reset and repeat several times.

Photos by Matt Majerski

HAND DRAGGIN' SLASH

Preferably performed on snow, this is a great way to over exaggerate Kelly's powerful slash mechanics with an extra point of support to help with confidence

1. Get low.
2. Place your back hand in the snow, right in front of your rear toe.
3. Start to drive the board forward.
4. Extend (shrelp) your legs slightly, pushing the board away from your core slightly and creating the same scraping feel from the extension "shrelp" drill.
5. Finish with the tail loaded and the nose of the board turning back up hill. If executed well, you'll be fully laid out and balanced on your back hand, toward the tail on the toeside edge.

Photos by Matt Majerski

FUTURE STEPS

1. Develop the same process on the heelside edge.
2. Take this to the hill, moving slowly in a traverse. Remember to place the back hand on the snow and let it drag for a few feet before starting the slash moves. When you feel the energy building in the tail, either ride it to a stall with the nose pointed up the hill or release the energy and reset.
3. Start to work out of dragging the hand, creating the slash and returning to an upright, balanced stance.
4. Attempt to use a small amount of slash in every turn, just like Craig.
5. Take it to a favorite tree, bump, or pow run (we should be so lucky).

IT'S A WRAP

Snowboarding is a sport built around sensations. Every day I push myself to accentuate terrain and maneuvers just to get a little taste of what the pros feel (and seem to create so effortlessly). Watching Craig Kelly slash turns was and will always be a source of inspiration to me. I work to see the mountain as a series of opportunities to create fluid moves through transitions and generate my favorite feeling of loading and releasing energy in the board and my body. And now, you—and your students—can too! 32°

Chris Hargrave is the director of operations at California's Woodward Tahoe and recently developed the Burton Snowboard Academy with Northstar California Resort. He spends his time coaching athletes, training coaches, and teaching people how to shred. A new member of the AASI Snowboard Team, his mission is to grow the sport of snowboarding and protect its future by connecting with new participants one rider at a time.

Eric Schwink

Be low before making any moves toward the new edge.

HOMEWORK

If you haven't seen it, I strongly recommend *Let it Ride: The Craig Kelly Story*. The movie provides a behind-the-scenes look at the history of boarding and Kelly's life. Much like the feeling I got after watching the documentary *Dog Town and Z Boys*, this movie will make you feel like a snowboarder—or at least leave you wanting more.

—Chris Hargrave

Be Counter Intuitive When Linking Tricks on Box or Rail

By **TIM KENNEY;** photos by **TZVI BIELER**

One hallmark of skill on a box or rail is the ability to do change-ups—in which the rider performs at least two tricks in one hit, with a rotational movement between each trick. Of course, boxes and rails are extremely slippery surfaces, so some shredders may wonder how on earth they'd go about building the force to spin and counter spin.

Using a countered and cross-lateral position, this rider prepares for a front-side noseslide. His right hand is reaching across the front of his body toward the left foot and there is a major twist through the spine.

Keep reading to see how you can relate change-ups to something as common as walking.

MUSCLE STRENGTH AND MOVEMENT VERSUS TORQUE

Let's start by breaking down the movements in a simple way. First, think about our arm and leg movements when we walk. As the right leg goes forward, which hand goes forward? It's the left one. When the left leg goes forward which arm goes forward? You've guessed it. This is called cross-lateral movement.

Now take that into the snowboarding arena. The duck walk, which can be the static maneuver in a change-up progression, utilizes this same cross-lateral movement and can produce the same effect as walking. When the left leg goes forward the right arm comes forward. The same movement occurs when the right leg goes forward and so forth. Try doing a duck walk—a cross-lateral walking motion in which the rider uses fore and aft pressure, longitudinal board flex, and rotary movements to "walk" the snowboard—without this cross-lateral movement. It will feel ridiculous—kind of like you are Bigfoot running through the forest—and not be as effective.

The duck walk does not rely on cross-lateral movements alone. There is also a healthy portion of counter rotation to help get from foot to foot and "walk." In a duck walk, just as in a change-up, we are using the tension built up in the core and rotating along

the length of the spine and the lower back to create the move. The muscles are active in the core but because of the opposing relationship between our hips and shoulders we can use the tension created to unwind and rewind.

COUNTER ROTATION, PIVOTS, AND TENSION

Counter rotation is a rotary mechanism in which the upper and lower body rotate in opposite directions around the same axis, and allows a rider to spin or rotate the board and the lower body one way and then back in the opposite direction. Counter rotation can apply torque to the snowboard and can also cause tension in the core. Instructors and other high-level riders are accustomed to tension—and subsequent release—moves; we build and release tension constantly when snowboarding. Envision a high-speed, zipper-line bump run when a rider is moving down the hill but the board is pivoting left and right under the rider. The tension and control in the core, hips, and back when counter rotating are what allows the rider to travel in a zipper line downhill while moving from edge to edge.

The pivot slip is another great example of how tension and release through counter rotation creates pivot. A pivot slip is a maneuver that links one sideslip to another where there is no longitudinal motion to the board in between sideslips. The board is pivoting, but the rider isn't making turns. When he or she releases the edge from a sideslip and allows the nose to come into the fall line, the rider will experience the release underfoot and in the core. Upon moving into the next sideslip, tension builds in the core and back by creating opposing positions between the rider's hips and shoulders.

The tension and control in the core, hips, and back when counter rotating are what allows the rider to travel in a zipper line downhill while moving from edge to edge.

CHANGE-UPS

When I hop onto a rail for a frontside tailslide—frontside approach, hips rotated to face downhill, back foot on the feature—and want to hop off the rail in the same stance with which I hopped on, which arm can I reach forward to ensure that my shoulders will be lined up and ready for landing? My front arm. So here we have the front

arm reaching forward toward the back leg with the center of mass over the back leg, using counter rotation and cross-lateral movements to achieve the desired position.

Now it's time to take this one step further into a change-up. After I commit to the frontside tailslide, (front arm reaching toward the back leg) I use the tension in my back and core to work my upper body against my lower body. Then I go into a frontside noseslide—hips rotate to face uphill, front foot on the feature, with my back arm reaching across the front of my body and downhill toward my front leg. Presto change-up!

For the frontside tailslide, the rider again uses a countered, cross-lateral position. He reaches out with his left hand in front of and across his body toward the right foot, with his center of mass over the right foot. His left shoulder is pointed downhill to ensure that his lower body will unwind after completion of the trick.

TEACHING CHANGE

Here's a set-up for a basic progression for the change-up mentioned earlier. See if your students can duck walk. Riders who can do this are on their way to their first change-up.

Begin with a static drill on flat ground, having students hop 90 degrees to a frontside tailpress and stall there. Identify the correct positions: weight is over the back foot, the board is flat, knees and ankles are flexed. There is a slight curl along the length of the spine along with a twist to send the front arm to the back leg. Now instruct the riders to pop off the back foot and unwind the spine through the hips to a 90-degree *backside* nose press. Check for the proper position of weight over the front foot, flat board, knees and ankles flexed, slight curl along the length of spine along with a twist in the spine to send the back arm to the front leg. Your students should now pop out and land squared on both feet in the original direction of travel.

Once this complex movement can be done on flat ground, the next step is to move to an extremely flat run and have the riders do butters at slow speeds when they land. When sliding and doing this maneuver, your students will be landing on an edge, so emphasize that they will not use the edge when taking this maneuver to the box or rail. Experiment with "flat boarding" by taking your students to dead-flat terrain. Without sliding, have them experience the correct position and even drop the downhill edge into the snow to become familiar with what it will be like at the feature. Safety first. Do not ask your students to drop their downhill edge into the snow unless it is slam-free.

Next, take the skills into the park and onto a feature. Applying the wisdom of "new terrain, old task," be sure your riders land flat-footed on the feature. When they are first hopping onto boxes, be ready to dumb the movement down into pivots on the box instead of hopping from foot to foot.

Try this on a big fat fun box: Have students get their board flat under their center of mass and pivot from left to right to get the feel of the tension and release needed to make this happen. Be sure they have both of the slides dialed in before they try to combine them into change-ups on a rail or standard box feature.

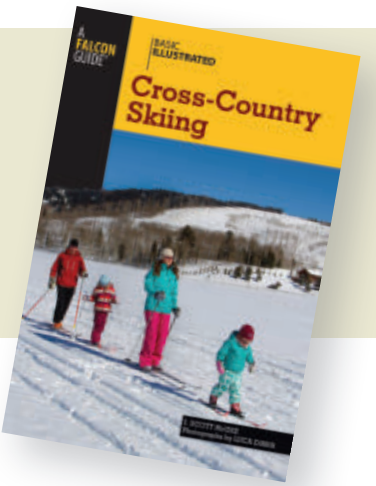
Work on different exits that will lead them to the change-up. For example, begin with the frontside tailslide and backside 270 out. On small rails where the consequences are low, begin with tapping your movements. Don't spend too much time on one movement or the other. Help students get the combo in a small amount of space. To make change-ups harder, have them try to 270 out or slide for longer periods of time on a more challenging feature. Also play with different types of change-ups, such as switch approaches on the feature or any combo of two presses you can think of. If you're really gung-ho, step things up with street approaches into change-ups.

Change-ups are a cool new maneuver that increases a rider's street cred with the local crews. They challenge a shredder's ability to combine tricks, be creative, and push themselves to new levels. Help students try a couple, because they are not as hard as they might think. 32°

Tim Kenney lives, rides, and coaches in Steamboat Springs, Colorado, and is the events & membership coordinator for PSIA-AASI's Rocky Mountain Division. He is a division trainer who has taught snowboarding for nine years and currently wears skinny pants because he thinks it is cool.

Nordic Team's McGee Pens Insightful Guide

By Tim Johnson, PSIA-AASI Assistant Editor



***Basic Illustrated Cross-Country Skiing* By J. Scott McGee**
2012, Falcon Guides
(Morris Book Publishing)
104 pages, illustrated. $12.95

Just as your skills improve on snow and you work toward the Level I, II, and III certification, growth can also expand while you're sitting still. No, not the kind of expansion that happens as you're downing chocolate croissants or perched waiting for refreshment after the lifts closes for the day.

PSIA Nordic Team Coach J. Scott McGee's new book—Basic Illustrated Cross-Country Skiing, published by Falcon Guides—doles out information and insights for those just dabbling in nordic skiing in the local park as well as those who can maintain V2 poling for hours without getting their heart rate above 90—well, so it seems as they motor away on the snow.

On the first flip through McGee's book, it seems to be a basic how-to piece. Yet as you spend more time with its 104 pages there's plenty of useful information for a range of skiers. Will the book keep you challenged for this season as well as when the snow falls again next fall? Likely so. Motivation expands your experiences.

With 11 chapters (listed at right) it will certainly keep you challenged longer than trolling through YouTube. If you're thinking of expanding your nordic skills or just starting out, this can be the "get-going" point. Try it for simple fun or expanding your skills into a new phase on snow.

Well over 50 images and montages by Luca Diana help show proper technique, repair tips, as well as the bounty and the sheer fun on snow. The range of photos helps both beginners (of all age) as well as seasoned skiers.

While McGee is a nord who enjoys set track, he also relishes taking spring backcountry routes across Wyoming's big mountains. "Routefinding is a hard-won skill because learning to read terrain is a skill borne of experience and mastered through mistakes" he writes. "Most people take years to develop the combination of intuition and experience that makes a good routefinder. Staying on the established trails might seem safe, but masterful routefinding can sometimes actually be safer, and, besides, exploring is a big part of the adventure."

The book also takes us back to the eighth century—though this snow-run was not for fun. According to the ski legend, Norway's child king was in peril in 1206 but was rescued by men on skis. It's a tale that the country has honored with the famed Birkebeiner race since 1932.

McGee brings other little nuggets to the book as well. An example: In southern Europe, early cross-country ski boots were held down on the ski at the front and back, while in the northern part of Europe, the nordic folks would have the heels relatively free. While that tidbit of info may only win you a bar bet—or not—it's yet another piece of sport-specific background that expands your knowledge.

Along with PSIA's free-heeled members, books like McGee's should entice more to join the nord folks. Overall, it's a well-done primer on this sport.

One other plus of the book is seeing, on the cover, a family of four enjoying the track—who turn out to be McGee's family. Another great shot shows one of his daughters sprawled on the corduroy, laughing hard, alone with her dad.

Here's another valuable nugget of advice from the McGee's book, fittingly placed in the book's introduction: "Yes, you can ski if you can walk, but skiing better is where it's at." 32°

CHAPTER LISTINGS

SPRING 2013 AD INDEX

MAGAZINE INDEX

This index is a partial listing of articles published in *32 Degrees* in the past two years. PSIA-AASI members may access full digital editions of each issue since the magazine's launch in fall 2008 at TheSnowPros.org.

THROUGH THE LENS

As a kid did you think you could fly without wings? Do you have the scars to prove it? Well, that gravity thing is still a bugaboo, but it seems that Level III snowboard instructors Doug Fagel (left) and Dustin DeNike are working hard on solving the problem at Alpine Meadows, California.

Thrive Snowboards

Things That Count

Snow is falling as you drive in to the lot and there are smiles on you, your spouse, and your kids. It's the same with your colleagues. As you approach the locker-room door, an instructor balances two paper cups and a notepad as she works to get it open—and keep the coffee in the cups. You look overhead—just a quick peek—to see that the snow is still coming down. What will be the highlights to discuss at day's end? Keep your ears—as well as your iPhones and cameras—ready. If we pick your shot or story, we'll send you a $25 gift certificate for the PSIA-AASI *Accessories Catalog*. Submissions should be sent to 32Degrees@thesnowpros.org, and include "Last Chair" in your subject line.

INQUIRING MINDS

In our Winter 2013 issue we asked readers what the best thing their supervisor ever did to help them with a lesson. Eastern Division member David Horowitz, (Alpine I) recalls a difficult day:

"I was being treated for the dreaded 'C'. Treatments continued throughout the season, but I skied every weekend that year. There were days it was difficult, but I wasn't going to let C beat me. The drive home was tough since I was so fatigued. One afternoon I had a group of elementary school kids. We had a blast making lovely turns all over the bunny hill. Then it happened—the sickness. I did my best to shield my students; I think I was successful. I ran into Tony and asked him to take over my class. I zipped into the staff lounge and gave up my guts. I cleaned up and was back on the hill in 30 minutes. I got back to the lesson and Tony stayed with the group. I could not have completed the lesson without his assistance. Tony the Cookieman, you made a huge difference in my lesson that day—a lesson that I will happily remember when someone else needs help."

Our next "Inquiring Minds" question is:

What was the best customer service that you witnessed this season?

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