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32 DEGRES

THE JOURNAL OF PROFESSIONAL SNOWSPORTS INSTRUCTION | WINTER 2013

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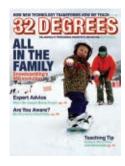
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Two-and-a-halfyear-old Norah
Ertsey has a
ball—actually two
snowballs—as
her dad Adam
introduces her to
the thrill of riding
at Colorado's
Steamboat Resort.
Photo by Eric
Schwink.

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32 DEGREES

The Journal of Professional Snowsports Instruction

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32 DEGREES is an official publication of the American Snowsports Education Association Inc. Education Foundation and is published in the fall, winter, and spring of each year. *32 Degrees* is a registered trade name of the American Snowsports Education Association Inc. Education Foundation, located at 133 South Van Gordon Street, Suite 200. Lakewood, CO 80228.

CHANGE OF ADDRESS: Address changes and inquiries regarding subscriptions may be submitted via e-mail to 32 Degrees@thesnowpros.org or by conventional mail to 32 Degrees, 133 South Van Gordon Street, Suite 200, Lakewood, CO 80228. Please reference the old address and ZIP code as well as the new. Association members can also indicate a change of address through their member profile accessed via www.TheSnowPros. org. The post office will not forward copies unless you provide additional postage. Replacement copies cannot be guaranteed.

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ISSN 1943-7463

32 Degrees is printed with inks that contain a minimum 27.3% by weight renewable content.





The Golden Age of Instruction

By Eric Sheckleton PSIA-AASI Chairman of the Board



very season my admiration for PSIA co-founders, Curt Chase, Max Dercum, Jimmy Johnston, Bill Lash, Doug Pfeiffer, Don Rhinehart, and Paul Valar continues to grow. Certainly for the courage it took in 1961 to vote to transcend the sport's regional differences and create a national instructional association focusing on enhancing *everyone's* skiing ability—as well as their enjoyment and appreciation of the sport.

But also for the foresight they showed in creating a teaching organization that could continue to evolve, embracing freestyle, snowboarding, a tele resurgence, shaped skis, rocker, and adaptive skiing and riding.

More than 50 years later, I believe what we all now know as PSIA-AASI has become the most successful, innovative, and open-minded entity in the entire world of ski and snowboard instruction. And after so many high points over so many decades, it feels as if right now we are still just entering the golden age of teaching.

First, because of the tremendous membership we have, with nearly 32,000 members sharing a national network of insight, expertise, and inspiration. By helping an adaptive student enjoy the thrill of snowboarding for the first time or helping World Cup skiers perfect their fundamentals, our members—all of you!—continue to contribute to the success of your association. And we keep getting stronger every season.

Second, because of the way in which the entire ski and snowboard industry has re-embraced the value of quality instruction. January's Learn to Ski and Snowboard Month and the Bring a Friend Challenge, the findings of the National Ski Area Association's Model for Growth, and the strong partnership of so many brands like Subaru and Patagonia are all great examples of how many other entities are working with us to ensure our success. That's because when we share the joy of being outdoors in the winter, or the pride of teaching a new skill to a student, the entire outdoor industry wins.

Third, I feel that we all really do work hard to find the best ways to share the sports of skiing and snowboarding—for both you and your students. Whether it's the PSIA-AASI Teams, who right

Finally, and this is an opportunity that continues to grow, are the ways that we can interact with each other-and also with our customers. PSIA-AASI's upgraded website—TheSnowPros.org is more vibrant and interactive than ever, filled with exciting news and information. The number of members joining the conversation on Facebook and Twitter (now accessed through the Facebook and Twitter pages and the website) gets bigger every day, which means more fun and knowledge for everyone. On YouTube and on the airwaves, Go With a Pro keeps expanding its reach and its library of digital instruction. And right here in the pages of 32 Degrees, I feel our content has reached a new level of timeliness, purpose, and anticipation. You are critical in contributing to that content as PSIA-AASI seeks your voice via social media and opportunities to contribute to the magazine.

More than ever, it feels like we are at the start of something great again—just

More than ever, it feels like we are at the start of something great again—just like we have been so many times in the history of this important association.

now are working on the cutting edge of freestyle, adaptive, snowboard, alpine, and nordic instruction, or our muchanticipated new manuals, aimed at simplifying and accelerating the process of improvement, or numerous online resources like the *Movement Matrix* or our *Entry Level Instructor's Guides*, there's a driving desire to make skiing and riding more accessible and easier to enjoy for everyone.

like we have been so many times in the history of this important association. We are going to take these fantastic sports and their amazing culture and community into the future, together, for all the generations of snow sliders to come.

Which, when I think about it, might have been the same sense of opportunity PSIA's co-founders saw when they first launched your association. 22°





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YOUR SPACE

What If Snowboarding Came First?

By Scott Anfang

way from the days when many people thought of snow-boarding as an invasion of ski resorts, a rogue sport mostly made up of rebels. Nowadays, snowboarding is a respected activity at virtually every resort in the country, encompassing people of all ages and walks of life. Even so, I'm reminded of lingering negative attitudes whenever I hear blanket comments about snow-boarders breaking the rules on the mountain or being rude.



This led me to an interesting thought: Most of the mountain guidelines and etiquette were established before snowboarding was even in the picture. So, how would things be different if snowboarding had come *first?*

Imagine how your resort might look today if snowboarders had designed and built it. Everything from the overall layout of the area to the type of trails offered would be different, wouldn't it? For example, terrain designated for beginners probably wouldn't have sidehill fall lines where gravity sucks riders into the low side of the trail.

And I doubt that roads and catwalks—which tend to flatten out in spots and be narrow—would be marked as the mountain's "easiest" trails.

Had snowboarders been in charge of resort design, I think there'd be more emphasis on freestyle and playing with the terrain. Resorts would be more like big playgrounds, with terrain features all over, and there probably wouldn't be fences designating where you can and cannot jib, jump, and play around. Instead, there might be places where you'd have to go through a baffle, come to a stop, call your drop, go one at a

What PSIA-AASI Has Done For Me

I think you can empathize with the fact that I love to ski. I love to encourage others to become more proficient at skiing, so, for me, being an instructor is a blessing. Season after season, I am amazed how much I have learned . . . and how much more there is to learn.

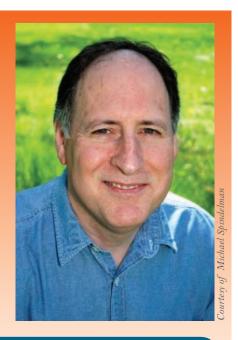
Fellow PSIA instructors are a vast resource to help me be a better instructor and skier. As I have gone through the different levels of certification—I'm working on Level III now—I've honed my knowledge, which has made me more accurate, profoundly more effective, and, above all, helped me have more fun with my customers.

PSIA has provided me with some amazing talent from which to learn. It has inspired me to push myself and become more accurate in what I do, see, and say. I have been humbled more times than I would like to admit, but I am a better instructor, skier, and person for being a member of PSIA. Being a ski instructor is a great activity, and I'm fortunate that I get to do it season after season. Plus, it helps me stay fit and forever young. No matter what kind of a day I'm having, I don't have

to look far to see people smiling and having a good time.

This will be my tenth season as an instructor. No matter how long a season is, they keep getting shorter thanks to PSIA. I can honestly say my customers completely benefit from what I have learned, whether it is from a Master Teacher instructor helping me improve or an examiner helping me prepare for an exam. Thank you PSIA for keeping the bar high. The dues I pay—both the annual kind and the time I spend improving me—are for my customers. But the satisfaction I get from skiing the way I do now is priceless.

Michael Spindelman Level II alpine instructor (two-thirds of the way to Level III) Kissing Bridge Ski Area, NY





For additional insights and perspective from Michael Spindelman on his journey toward Level III certification, check out Web Extras at TheSnowPros.org. You'll find them in the drop-down menu for 32 Degrees on the "Publications, Video & Resources" page.

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YOUR SPACE

time, and go as fast as you wanted. That way, all the thrill-seeking straightliners and speed-race types would be in one area rather than mixed in with the general public.

Even the storage racks for gear would have a different setup. On a typical day at many ski areas, snowboarders have to leave their boards on the ground when they go in the lodge—right next to all the skis neatly stored upright in racks. Yes, there are racks designed for snowboards, but many areas don't offer them. I used to try to set my snowboard up in a ski rack only to have it fall over, damaging my board and taking a few skis down with it. And I'm sure there are a lot of skiers out there who have had to move a snowboard to get their skis, setting off the same chain reaction. I've found it's just easier to leave my board on the ground (chances are it will end up there anyway). It's hard to imagine the scenario in reverse, with snowboards in racks and all the skis on the ground. That would also be annoying, and potentially unsafe, but it wouldn't make sense to blame the skiers for it.

What about Your Responsibility Code? Originally called Skier's Responsibility Code, it was revised in 1994 to include snowboarding, but would it be written differently if it had been initially drafted with only snowboarders in mind? "Observe signs and warnings," for example, gives off somewhat conflicting messages to me as a snowboarder. When I come across a "SLOW" sign, this clues me into some sort of change ahead, but it sometimes means the exact opposite of slow since I might have to hold my speed while trying to obey another point from the code—always stay in control—so I can get across a flat area that lies



ahead. That same slow sign might also be a warning about a high traffic or congestion area, which means I need to pay attention and tone it down on the jibbing rather than merely slow down. Skiers may assume I'm ignoring the rules, but I'm really just trying to adapt them to a snowboarding context.

With respect to "people ahead of you have the right of way," I suspect snowboarders might have worded it a bit differently and included more specific details. Maybe something along the lines of "people downhill of you have the right of way, and, if possible, pass them on their toeside so they can see you as you go by."

Going back for a moment to signage, riders might encounter a "No Jumping" sign on a groomed run with a change in pitch, but such terrain is sometimes ideal for teaching beginners how to safely catch their first air (before taking them to the park). If snowboarders called the shots—and keeping safety in mind—a few of those "No Jumping" signs might read "Jumping Okay Here, No Parking On or Below this Spot."

So, again, what if snowboarding came first? Imagine it had been around for hundreds of years and one day someone walked up to a lift with a pair of skis.

How do you think that would go over? Called to the scene, the resort manager would likely ask tons of questions: "Can you stop on those things? Can you make turns?" "What do you mean they can pop off your feet?" "What are those sticks with pointy ends used for?" "Are those boots safe to walk in?" "How do you see where you're going when you ride switch?" The resort manager just might say, "I dunno, sounds like a bad idea to me."

It's human nature to struggle with change, and we all tend to align with what's familiar. But we need to remember that riders and skiers share the love of the mountains, the thrill of sliding on snow, and the camaraderie that brings. We also need to acknowledge that regardless of how we'd tweak the rules at resorts, they weren't put in place to take all the fun out of snowboarding but to keep things safe for all mountain users.

Snowboarding has come a long way in a relatively short time—from initial rejection to being credited for helping save the ski industry, influencing the design of ski and snowboard technology, and finding prominence at the X Games and Winter Olympics. And snowboarders are now involved at higher levels at resorts and in the snowsports industry in general. I'd suggest we run with that image and not the one of rule breakers. I think we'll go farther while helping keep snowboarding—and skiing—what they were originally intended to be: fun! **22**°

Scott Anfang, who this year enters his third term on the AASI Snowboard Team, teaches at Colorado's Steamboat Resort. His credentials include Level III Snowboard and Adaptive Snowboard certification as well as Children's Specialist 2. For more of his perspective on snowboarder-friendly resort design, see "The Snowboard Family: How to Embrace Evolution and Grow the Sport" on page 80.

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 32 Degrees@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.



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BOOTLEG LESSON PERSPECTIVES

As a Level I snowboard instructor who's taken a season off from teaching at her local resort because she can't afford to travel and maybe teach, I wonder why the tone of "Underground Teaching: You Don't Want to Go There" (Fall 2012) is less in support of instructors and the profession and (seemingly) more as an advocate for the resorts. Why aren't you advocating for better pay and better work conditions that would make underground teaching less desirable?

Jennie Joa Rochester, MN

I'm writing in response to Dave Byrd's article "Underground Teaching: You Don't Want to Go There." I appreciate Byrd's contribution because it furthered my understanding of current thinking and practices in our industry. Yet this enhanced understanding left me feeling sad and disappointed. I'd like to explain.

Joseph Stiglitz writes in *The Price of Inequality: How Today's Divided Society Endangers our Future* about the concept of rentseeking, which is the attempt to obtain economic rents—the margin between the price one is able to charge for an economic good versus its raw costs—by manipulating the social or political environment in which the economic activities occur. And at face value, what could be wrong with that—doing whatever it takes to maximize revenue?

In "Underground Teaching," Byrd explains that the resorts either own the property or have an exclusive lease/operating agreement with the U.S. Government. Why shouldn't they be able to control what occurs on their property? After all, aren't they *responsible* for what takes place on their property?

In the larger societal context, the problem with rent-seeking is that it reduces social wealth, the total economy. Instead of helping to make a bigger pie, the rent-seeker works to increase his/her slice of the pie relative to others. More often than not this is a short term, maximal-gain perspective.

Have the resorts considered the lift tickets and the food being purchased through the business being brought to the mountain by the underground teacher? Have the resorts considered that such activity might likely result in repeat business as well?

And if the underground teacher is really becoming a threat to the resort's ski school, isn't it time to learn what value-added service they're providing? Can't this be a win-win for all? Simply eliminating the underground teacher seems to be wasting a valuable learning opportunity as to what the consumer demands. Instead of banning the underground teacher, maybe the resort should work with him or her.



And what exactly *is* underground teaching? For example, on more than one occasion a student that I had in a ski school class one week would catch me on the slopes or in the lift line the following week to ask about something we had been working on or to take a look at what he/she was doing to see if they had gotten what I had been teaching. Is this teaching? Is it a lesson? If they slip me a ten spot have I received a fee? Or is it more of a delayed tip from a prior lesson?

On the other hand, if, instead of accommodating the consumer's request or question, I politely inform them that the mountain's policy is for them to purchase a lesson in order for me to provide the feedback they seek, what do we imagine the consumer's reaction might be? Am I creating a favorable image of the mountain? Is this consumer likely to return?

Knowing whether what I'm doing will be considered "teaching" by resort management is my greatest concern. While Dave Byrd is probably speaking to formal fee-for-service arrangements, resort management holds all the cards. If they say I'm teaching, it doesn't matter what I think. There's no court or jury to which I can turn. And even if there was, the resort has more resources than I do. They win by simply wearing me out. (Another point Mr. Stiglitz makes about inequality.) They get to decide.

I love to ski. I love to teach. I really love to teach skiing. Whenever I'm out on the slopes, no matter who I'm with, I'm talking skiing. Why should I have to think twice about that?

David Sky Alpine Level II Concord, NH

The article on bootleg, under-the-table lessons caught my eye immediately. Point blank; I abhor the practice and those who engage in it.

I strongly suspect that it goes on at my home area. I'm being polite here. I think very little of instructors who do it.





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I'm being polite again. Any instructor who engages in it should be fired, immediately, no questions asked. Imagine having such a black mark on your pro resume. Hardly a "pro" resume item!

Having said that, I'll tone things down and re-spin it.

As a long-term veteran of teaching, with a very solid resume, I bring a number of really important things with me when I leave the locker room each morning: the statement (and pride) of my certifications, my reputation, my credibility, my honesty, my self-respect, my dedication to my craft, and my dedication to my clients, to name just a few. I choose not to mention skiing ability because that's still a work in progress, nor is it the most important thing I bring to a lesson.

An instructor who teaches outside the loop is making a statement to me that they possess none of the above characteristics. Why would you hire such a person?

And here's another spin on the subject. The area charges "X" dollars for a lesson. In return, I receive "Y" dollars. The difference does wonderful things for me. It allows them to put snow on my mountain and run the groomers and lifts for me.

It covers the cost of my insurance policy. It runs a call center to handle my clients' requests and needs. It maintains a computer network to handle and manage my scheduling. It covers the cost of support personnel to allow me to move seamlessly through the day. It covers the cost of the ski patrol, should I need it. The area supplies my uniform/locker room. They handle my payroll. The list goes on and on. I can't afford to do all that.

In a way, I'm running my own business without having to get involved with the expenses or headaches of running the business. If I had to do all that I'd never get a chance to ski. Why would I want to screw that up? It allows me to focus on the customer, the student, my client, my fellow instructors.

The mountain pays me well, I pay them well. I get to ski a lot. I think I'm getting the better end of the deal.

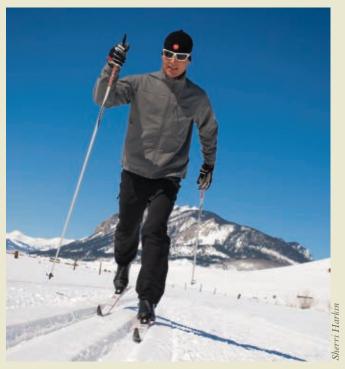
I've been asked to teach a bootleg lesson...but... GeeeeeZusss...who's got it better than me?

> Bill Austin Okemo Mountain, VT

CROSS-COUNTRY, NOT NORDIC

As a former member of the PSIA Nordic team, I have a few issues with Eugene Buchanan's article "Selection Shift Signals Evolution of Cross-Country, Telemark Skiing" (Fall 2012). First off, the title should refer to an evolution in the selection criteria for the team, not an evolution of skiing. The two disciplines have been evolving separately for a long time. Only now has PSIA decided to select team members separately for each. Perhaps the word "reflects" would have been a better choice than "signals."

Next, the first paragraph makes the unqualified statement that as far as the Nordic Team is concerned, free heel equipment is the only thing the two forms of skiing have in common. Even a casual acquaintance with the common threads of skill usage, one of the core concepts of the American Teaching System's



Skiing Model, would include an understanding of the many similarities that bind snowsports together.

My biggest gripe is the confusing use of the term "nordic." The term "cross-country," as used in the title, and in the quote from Scott McGee is correct. In the body of the article, however, the term nordic is used instead. I'm sure the telemark skiers on the team would prefer that the term nordic be reserved for the name of the team, and not used as a synonym of cross-country.

Finally, I don't question that Ross Matlock is among the best in the nation as a cross-country instructor, but his picture does not illustrate that. If he'd applied Megan Spurkland's excellent tip on page 100, his right pole tip would not be six inches off the snow as shown. The "outreach" Earl Saline says that "we can do in nordic [sic]" would be more effective with a better photo.

Urmas Franosch

Telemark III, Cross-Country III, Alpine III Mammoth Sports School, CA

Thanks, Urmas, for your comments regarding the nuances of the term "nordic." Our apologies if the image we selected for use with the piece was, perhaps, not the ideal frame from that movement sequence.—Ed

EXTENSION TENSION

With regard to Juris Vagners' response to the Matt Boyd article "Take Extension Cues from the Racers" (Letters to the Editor, Fall 2012), I'm reminded that, in U.S. ski teaching, so much is written and said about "moving the center of mass." There are endless discussions of how, how much, when, where to, why, and why not. None of that is really of much interest to a student, and none of it would even be of anyone's interest but for one thing: most of the time the student doesn't want to do it. Charts are put up, pictures of great racers are shown, diagrams of force vectors are made. All useless.

This is not a question of proper "leg extension." Every able-bodied skiing student can walk up and down stairs. This is not a matter of "effectively managing external forces." The job of the instructor is not to introduce physics to the student, but to convince the student that they will not die if they move ever so slightly to the opposite side of the skis, toward the "fall line" (the most inappropriately named thing in skiing).

Vagners, I believe, is incorrect in saying that an external force is required to "move forward and downhill." I can get up out of this chair without a push. Once standing I can move in any direction I want. How can it be any different if I am sliding on a pair of skis? The exception is when we are skidding out of control and out of balance.

On the other hand, it is also true that if I am finishing a carved turn I can relax my downhill leg and my body's momentum will take me to the other side of the skis. That would be true even if I were running, ice skating, or rollerblading.

Granted, there has been too much confusion over the years about skiing mechanics. People were taught to get low to "manage the pressure." So naturally, you then had to "stand up" to start the next turn. You had to sink every time you planted your pole, then stand up; usually up and back. People said it was better to finish turns on the back of the ski. Occasionally, it was.

Students would be seen on the slope with arms straight

out like pokers, but with their buns behind their skis. Since it's wasn't "teacherly" enough to say "stand up and lean forward," people were told to "extend" and flex certain muscles in their ankles. One of the great things about the advent of shaped skis is that it became more obvious what the base technique needed to be. Almost all the old arguments have died out.

As for the analyzing photos of the great ski racers, it is difficult to see how those photos apply to average students. Matt Boyd suggests that one approach is better than the other. Ted Ligety might object. One turn does not a technique determine, nor necessarily win a race.

This is pretty esoteric skiing; as would be competition bump skiing or extreme skiing. But then, photos of actual students are usually pretty boring. Unless maybe they're of a super model.

> Patrick Hunter Carbondale, CO

CORRECTIONS

In the Fall 2012 issue, we erred on a few things in the feature package on the selection process and outcomes for the 2012–16 PSIA-AASI Teams. On page 42, we listed the wrong home area for AASI Snowboard Team member Scott Anfang. He teaches at Steamboat, not Breckenridge. In a caption on page 44, we misidentified Alpine Team candidate El Furtney as Heidi Ettlinger. 32 Degrees regrets the errors.





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

Snowboard Teachers Get Another Tool

With the release in November of AASI's Snowboard Teaching Handbook, snowboard instructors have a brandnew resource for dialing in on engaging and effective lessons for adults and children. The handbook, produced in partnership with the Vail and Beaver Creek Ski and Snowboard Schools, offers information, drills, and exercises that prove invaluable in helping students meet their riding goals. It covers all proficiency levels and incorporates freestyle elements for the full spectrum of riders—plus it fits in your pocket for easy on-hill access.

The Snowboard Teaching Handbook (item #122) is available for \$22.95 through the PSIA-AASI Accessories Catalog, the online version of which is available at TheSnowPros.org.





Copper Mountain Fall Conference Follow-Up

The last weekend in October was a momentous one for PSIA-AASI. Division leaders from across the country met at Copper Mountain, Colorado, to focus on building greater consistency in the association's certification programs.

Adaptive, alpine, children's, cross country, snowboard, telemark, and freestyle groups worked together to reach consistent understanding and interpretation of their national standards. The impacts of this event are many, including greater clarity of where the "bar" is at each level within the standards, greater awareness of how each division assesses the standards, and recognition of the consistency of PSIA-AASI's certification programs.

For members, the goal is that you hear consistent information and receive consistent training toward the standards across the country. At the same time, divisions will take information from the Fall Conference to train exam staff to increase the consistency between their

examiners. As a member, this means you should see similar information from the different division staff you train with and even more consistency in exam scoring and results.

Follow-up will include surveying participants on how the Fall Conference can be improved and checking in with divisions throughout the season to assess the ongoing impact of the event.

PSIA-AASI's goal is to continue the Fall Conference event as a means to increase the communication, collaboration, and consistency across the association.

Abraham, Wong, and Kelly Lead 2013 Hall of Fame Class

Acclaimed ski instructor Horst Abraham, freestyle skiing icon Wayne Wong, and world champion and snowboarding pioneer Craig Kelly lead an outstanding class of six inductees who have been elected to the U.S. Ski and Snowboard Hall of Fame in Ishpeming, Michigan. Joining them will be world champion freestyle moguls skier Jeremy Bloom, ski resort developer Hans Geier, and World Championship medalist Kirsten Clark.

Abraham rewrote the script for American ski instruction. Starting with the Aspen Ski School and later serving as the technical director for the Vail Ski School, he eventually became the education vice president for PSIA. As



Horst Abraham is headed to the Ski and Snowboard Hall of Fame.

PSIA-AASI Ara

the developer of what became known as the American Teaching Method in 1980-which focused on teaching skiing skills instead of skiing turns—he led the U.S. to become the world leader in snowsports education.

Wong was the leading and most popular skier of his day when hotdog or freestyle skiing was emerging on the scene. Kelly won four world snowboarding titles, worked with Jake Burton Carpenter to open countless ski areas to the sport, starred in numerous films over 20 years, and was awarded TransWorld Snowboarding's Lifetime Achievement Award in 2002.

Bloom won two World Cup titles and a World Championship in the mid-2000s. In 2003 he won gold in the dual moguls event at the World Championships and a silver in the individual moguls. Geier was a leading manager and developer of ski areas across the United States for nearly 30 years, and Clark won 12 U.S. titles and reached the World Cup podium eight times.

The Hall of Fame induction will take place at the Marriott Vail Resort in Vail, Colorado, on April 13, 2013, as the final event for Skiing Heritage Week celebrating Vail's 50th anniversary. 32°





Early Openings. From Minnesota to Vermont to North Carolina to Colorado to California. plenty of ski areas

got this season off to a fast start.



Warm winters. Yuck!



National Standards. Snow Pros from across the country came together at Copper Mountain.

Colorado in October to help take everyone's game to the next level. (See page 14.)



Failing to take advantage of all of your association's national resources.

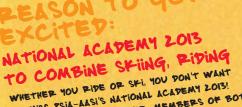


Being able to access the completely recharged TheSnowPros.org website from your

tablet or smartphone so you can check the news, access deals, or scope out the Movement Matrix any time you want.



Being out of touch.



TO MISS PSIA-AASI'S NATIONAL ACAPEMY 2013! FOR THE FIRST TIME EVER, MEMBERS OF BOTH THE PSIA ALPINE TEAM AND AASI SNOWBOARD TEAM WILL BE TOGETHER ON THE BEAUTIFUL slopes of snowbird, utak, offering the FIND OF CUTTING-EDGE INSTRUCTION, FIRST-

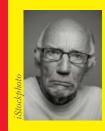
CLASS PRESENTATIONS, AND NON-STOP FUN TO HELP END YOUR SEASON ON A HIGH NOTE. HIGHLIGHTS INCLUDE: . FIVE DAYS OF SHING AND RIDING WITH MEMBERS AND ALUMNI

- . INSIGHT ON THE INNOVATIONS SHAPING THE FUTURE · PERSONALIZED COACHING AND GAME-IMPROVEMENT STRATEGY
- . SHI AND SNOWBOARD DEMOS FROM PSIA-AASI OFFICIAL SUPPLIERS
- . A FANTASTIC APPES SCENE
- GO TO THE THESHOWPRO. ORG AND SCROLL DOWN TO EDUCATION & INFORMATION (AT THE BOTTOM OF THE HOMEPAGE). THEN CLICK ON THE EVENTS & MEETINGS LINK TO GET MORE INFORMATION AND REGISTER. YOU DON'T WANT TO MISS OUT ON THIS EPIC EVENT.



Sharing the sport. National initiatives such as Learn to Ski and Snowboard Month and

BringAFriend.org are making it easier than ever to get new people riding - and also taking professional lessons.



Keeping all of this fun to yourselves.



Tibber's Pocket

We know all you freestylers out there can slide just about anything, so why not slide on over to TheSnowPros.org to check out the latest installment

of "Jibber's Pocket"? Just go to the Publications, Videos & Resources page and choose Web Extras in the drop-down menu for 32 Degrees.



Where Do You Read 32 Degrees?

Mario Furtado is a PSIA Level III alpine instructor and staff trainer at Mt. Abram in Maine, plus a lover of warm waters in the off season. This season he was drawn to Aruba. "Every summer I spend some time reading my 32 Degrees at beaches somewhere. While walking, I felt the sand under my feet and ankle, and noticed how subtle those movements were. I'll use that feeling as an analogy with clients."

Furtado will receive a \$25 gift certificate for the PSIA-AASI Accessories Catalog. If you've got a wanderlust for travel, send us your images. Don't forget that your shot must include a recent cover of 32 Degrees.

SPONSOR SPOTLIGHT

RAMP SPORTS

LOCATION: Park City, Utah

YEARS IN THE BIZ: Concept and fundraising since 2008.

Making skis and snowboards since winter 2011-12.

WEBSITE: Rampsports.com. RAMP's pro purchase program can be accessed via the member log-in at TheSnowPros.org.

WHY THEY ROCK: RAMP skis and snowboards are made in the USA using sustainably harvested bamboo, resin made from pine pitch,

and a factory powered by wind to help ensure many more snowy

winters to come. Plus they give you a \$50 credit when you order new skis if you turn in any pair of old skis which they then recycle for you.

WHAT YOU MAY NOT KNOW: RAMP can rapidly prototype new ski designs for almost instant on-snow fun. With their mountain-based factory they can take a design from the drawing board to the slopes of Park City in 24 hours, allowing them to test out countless design options during the course of a winter until they get each detail just right.

ROAD TRIP WORTH TAKING



Held every year in Denver—with an awesome additional two days of on-snow demos at Winter Park Resort and Devil's Thumb Ranch—the SIA Snow Show and Demo is the ski and snowboard world's equivalent of winning one of Willy Wonka's golden tickets. The ultimate one-stop highlight reel of all of next season's hottest new skis, snowboards, apparel, and accessories, it seems like a dream that after four days indoors, you get to head to the hills and ride all of it. Held from January 31

through February 3 at the Denver Convention Center, and from February 4–5 at Devil's Thumb and Winter Park. For more info, check out Snowsports.org.

NAME/ CREDENTIALS	MEMBER SINCE/ DIVISION	WHAT ARE YOU MOST EXCITED FOR THIS SEASON	WHAT'S YOUR TRAINING GOAL FOR THIS YEAR?	WHAT'S ALWAYS IN YOUR POCKET ON THE HILL?	WHAT EQUIP- MENT DO YOU RIDE/SKI ON?
Nancy Zalewski Sunburst Ski School, Kewaskum, WI Children's Specialist 2, Alpine Level II	1997 Central	Hope to get up Mount Bohemia to get more mogul work in!	Getting my feet going again. I want to get back into bumps again.	Cough drops. After teaching 7- and 8-year-olds, I'm known to be pretty loud on the hill.	K2 Mach SL. The kids I teach have worn them out on top as much as I have the bottoms.
Richard "Cody" Crider Planning to travel across the U.S. this season. Snowboard Level III, Alpine Level I	2005 Western	Floating around to different divisions and shredding with friends and fellow instructors.	Catching up with old friends and sharing the love for our industry!	A goggle cloth. I hate having smudged lenses. It's one of my bugaboos!	Burton Mr. Nice Guy board and Cartel bindings. Nike boots.
Krister Rollins Mt. Abram, Greenwood, ME Alpine Level III	1987 Eastern	To ski a week with fellow instructors and PSIA-AASI Team members at the Master's Acad- emy at Killington, VT	To spend more time skiing and teaching.	I <i>always</i> have lip balm in my jacket.	Elan Amphibio skis.



Have you dreamed about going helicopter skiing or boarding? Your dream just got a whole lot closer!



Want to heli-ski FREE? With the CMH Pro Deal it's easy - just bring five new skiers/boarders with you to CMH and your space in the chopper is free!

CMH Heli-Skiing is pleased to offer PSIA-AASI pros Level II and up the chance to heli-ski/board at reduced rates or completely free with our Heli-High Five program. Not yet Level II? Sign up and be the first to know about special heli-trips exclusively for PSIA-AASI members.

To access PSIA-AASI member discounts for CMH, log in at **TheSnowPros.org** and click on the Pro Offers link at the bottom of the homepage. Then click on the CMH logo.

Think you could have some fun making fresh tracks every run? Heli yeah!!!









DAVID OLIVER

PSIA Alpine Team Freestyle Specialist

What do you do with your off-season?

I think about skiing 24/7, and I skateboard on my off hours. But the main thing in the summer for me is that I'm a chairlift mechanic for Breckenridge Ski Resort. It's really relaxing for me. I find a certain amount of solace in dealing with large machines. Two of my chairs are the Beaver Run SuperChair and Quicksilver Super6, which are some of the largest chairs anywhere, and they really don't care if you're happy or you're sad or if you're tired. You don't have to think about entertaining them or being nice to them, and you just show up and start wrenching on them and that's all there is to it.

What do you like about being on the mountain in the summer?

It's really eye opening, especially on lift maintenance. When you do work on a chair, it's on a mobile work platform that's hooked to a haul rope, and you move slowly because you have all of your equipment on it. It's very quiet between the towers, and, in the summer, you really see everything the mountain has that you don't see in the winter when it's covered in snow. It's one of the coolest jobs on the planet to be up there at 12,000 feet just slinging wrenches and enjoying the weather.

How did you get into it?

I worked summer operations at Breckenridge on activities like the alpine slide and mountain putt-putt and I would see a few of my acquaintances in lift maintenance and think, "that's what I want to do." I think I liked the idea of it because I love being around the guest in the winter, but I also need some time to recharge, and lift maintenance is what does that for me. If it wasn't for working summer operations, I could not be as flamboyant or empathetic or as attentive as I like to be because guest-service batteries never had time to recharge. That's what I like most about having that quiet time I get in the summer.

One thing you don't take a break from is being in the mountains—you're in them year-round.

It's kind of a comfort zone for me. I have always been around mountains, ever since I was a baby. It's my ocean, my security blanket. If I can see them, even if it's off in the distance, then I'm good. It kind of flips me out when I am not around them. It makes me kind of nervous.

Your wife, Sarah, had a baby, Aria, while you were at Interski in 2011. How's everybody doing?

Our first year was a little intense, especially with just adapting to the new baby and not understanding all of the ins and outs of holding onto ourselves at the same time that we were trying to do everything for her. Now we understand the importance of Sarah staying Sarah and David staying David, all while enjoying this great little buddy. We can go night skiing, or go watch a movie, or go bowling, and the girls love shopping, and everything is more the same as it was before, except even better.

Just like you, your wife is from Taos and also loves the mountains. How important is it to you to share that love with your little girl?

Sarah is a Taos girl, and when it comes to the mountains we don't really know any different. So we both want Aria to know that it's all there, and that she can do anything she wants do. Whether it's going hiking and snowboarding or teleing or just getting away in the summer, I want her to know that she always has the mountains. You meet so many people who move here because they see the mountains and can't get it out of their heads, and she gets to grow up here.

Now that winter is back, what do you expect from the season?

I expect the snow to be good, that's the biggest thing. The snow's always good, if it's there. As long as you're not skiing on dirt or loading the chairs on hay bales, then the skiing is good. I also expect a lot more hang time, many more terrain park laps, and a bunch more smiles and miles with my wife and my kid. 22°





Kelly Davis

SKIING AND SNOWBOARDING BY THE NUMBERS

o one knows the ski and snowboard business better than Kelly Davis, who is director of research for SnowSports Industries America (SIA).

From who is actually on the hill—including their age, favorite way of sliding, and annual income—to what equipment trends are moving the needle at retail, Davis collects the scoops that illustrate the fine point where a pastime becomes a professional business model.

32 Degrees sat down with her to ask about trends and how she sees instructors working to benefit the industry overall.

32 Degrees: With all the information you look at each year, what stands out in terms of participation numbers, and why people get involved in snowsports?

Kelly Davis: Last season's dip in participation numbers—more than 11 percent in downhill skiing and 7 percent in snowboarding—can be explained almost wholly by the lack of snow. That means that snow should bring a rebound in participation and possibly some pentup demand for the thrills of skiing and riding, and for the equipment, apparel, and accessories that go along with more active participation. One number that we are watching very closely is the huge increase in crossover between snowboard and alpine/freeski. In 2009-10, 26 percent of snowboarders said they also ski. That increased to 34 percent in 2010-11 and to 41 percent last season. At this rate, almost half of snowboarders will also ski by 2014-15. Also, most participants say that they got involved in snowsports (typically, before the age of 17) because someone who was already active in snowsports took them skiing or riding. SIA supports Learn to Ski and Snowboard Month, including the Bring a Friend Challenge that capitalizes on the growth that current skiers and riders

can inject into the market by getting a friend or family member started skiing or snowboarding.

32 Degrees: How about in terms of equipment trends—what kinds of skis and snowboards are driving the retail market?

KD: Rocker (reverse camber) snowboards and reverse camber and mixed camber skis continue to drive sales. In fact, more than two-thirds of all snowboards sold last season were rocker boards. They have become the norm. In skis, reverse-and mixed-camber options continue to grow in popularity, representing nearly 40 percent of all skis sold.

Mixed-camber options continue to grow in popularity, representing nearly 40 percent of all skis sold.

32 Degrees: What does your research say about how taking lessons impacts someone's short- and long-term snowsports experience? **KD:** Those skiers and snowboarders who start with a lesson their first time out are more than twice as likely to come back a second time, and the percentage gets better with each successive lesson. Our research indicates that three times is a charm; participants who have three or more lessons are most likely to stick with the sport and become our most reliable participant's year over year.

32 Degrees: What are you seeing in terms of kids' participation? Is the next generation already on the slopes?

KD: They are! Twenty three percent (2.35 million) of all alpine skiers are under 18 years old, and 27 percent (2 million) of snowboarders are not yet eligible to vote. The Millennial generation is on the



slopes, and they are particularly enjoying the terrain parks and pipes.

32 Degrees: What future trends are you most excited about watching develop?

KD: What will I watch most carefully in the early season? SNOW! As for the most interesting trends, they are in alpine boot technology that is making the experience more comfortable for all skiers. Also, of course, the reverse-camber skis and boards, the changing attitudes of the Millennial kids regarding snowboarding and skiing (they do both), the successes and failures in emerging markets like China, and a few consumer trends that could help swell our ranks of participants. The latter would include what we call "the Urban Woodsman" (i.e., that urban professional—outfitted in flannel, wool, jeans, and rugged footwear-who likes to spend weekends in the great outdoors while drinking craft beers) and renewed efforts to get Americans off the couch and burning calories.

32 Degrees: Any other data you'd like to share?

KD: Yes, did you know that snow sports participants burned 330 billion calories last season? That's the equivalent of 2.2 billion beers, or 475 million cheeseburgers, or 1.1 billion slices of pepperoni pizza. **E2**°





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hen Greg Stump released the iconic ski film Blizzard of AAHHHs in 1988, it was hailed as revolutionary—not just for its depiction of bigmountain "extreme" skiers such as Glen Plake and Scot Schmidt dropping cliffs and carving steep chutes, but also for its POV (point-of-view) sequence, captured by strapping an airplane-grade reconnaissance camera to Plake's head. Schmidt once said he was supposed to do the filming, "But the camera was so heavy I thought it would snap my neck."

How things have changed. In today's digital downhill age, tiny Contour and GoPro helmet cams—weighing only a few ounces—are now ubiquitous, as is a constant loop of "look what I snowboarded" video on YouTube, Vimeo, and Facebook. Camera technology has become so precise that goggle companies are now offering video capability, literally letting schussers see what they shoot. And with smartphones, you don't even need a camera. Just finish your call at the top of the mountain and start filming your descent.

Perhaps even more revolutionary is the ease with which people can quickly edit and broadcast their video. "Now it's just shoot, edit, share," said Teton Gravity Research Co-founder Todd Jones, who added that, "From the drop in cost of equipment, to the size and weight of the cameras, to the immediate distribution, it's all combined to change the market."

While the market Jones is referring to is the ski and snowboard video industry, cameras are also having a major impact on how skiing and snowboarding are taught. As much a compelling visual aid as they are another tool with which to provide an immediate connection between teacher and student, cameras continue to add more depth and detail to instruction, both on and off the slopes.

"I like to say that what it is doing is allowing us to 'experience the experience," said Rival Films Principal Matt Fults. Fults, who shoots the *Go With a Pro* segments for PSIA-AASI, said, "One of the coolest shots we ever got was when we strapped a Contour to the bottom of <code>[former PSIA-AASI Adaptive Team Coach]</code> Bill Bowness' rig and could see the shock, and the flex and the forces in the turn. We're getting a perspective we couldn't get before, whether that's for fun, for entertainment, or for educational purposes."



The ubiquitous helmet cam.



PSIA Alpine Team member Jonathan Ballou imparts *Go With a Pro* wisdom.

THE LESSON WILL BE TELEVISED

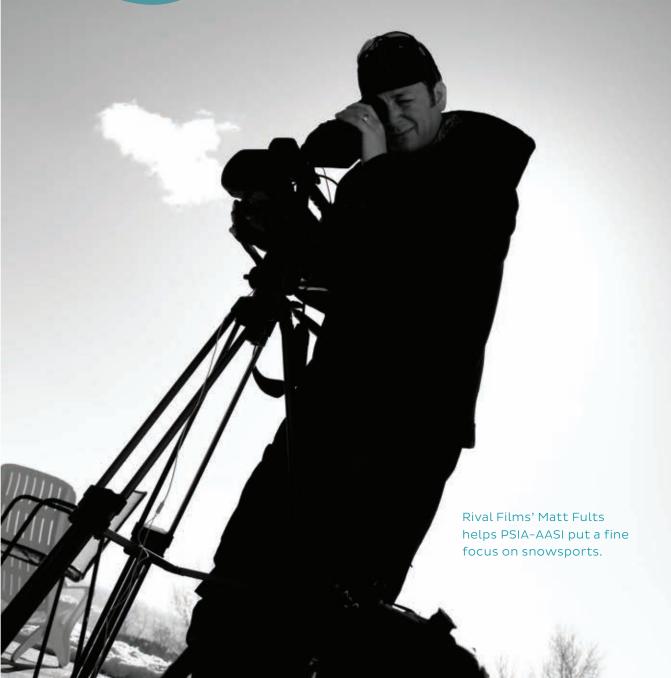
For Fults, the obvious benefit of film is its ability to reach people beyond the snow. The segments he shoots are all designed to provide valuable, quickly digestible instructional tips people can use when they are skiing and snowboarding, and also to encourage them to take a lesson when they actually hit the slopes. But he thinks they may also have a broader reach.

"I think, in some cases, the revolution in technology has allowed even more people to experience snowsports and think about trying it than would have ever done it before," said Fults. "It's all about the power of images and how we can use them to enhance the consumer experience, and I think we haven't even scratched the surface of how we as an industry can capitalize on that."

When it comes to using video in innovative ways, PSIA Alpine Team members Jeb and Matt Boyd are certainly doing more than just scratching the surface. Technology, and in particular video analysis, are fundamental to the success of their Arc2Arc Training Center, whether the student is actually skiing with the brothers in New Hampshire, or sending them video of their skiing from somewhere else. Utilizing V1 Pro video analysis technology (Sprongo is another popular

TECHNOLOGY THE DIGITAL AGE IS ALTERING INSTRUCTION

BY PETER KRAY





The Flaik GPS device, worn here by student and instructor, boosts safety and the entertainment value of lessons.

video-based coaching tool), they can add notes and coaching suggestions right onto the frames in a student's video clips.

"They send us video of 10 turns and we can look at it and upload it on V1 and then turn around and send them the feedback," said Jeb Boyd. Students improve more quickly, he said, because the video lets them see what the instructor is talking about. With race training being a key focus for Arc2Arc, Boyd said this is especially effective for the kinds of students he and his brother get.

"I find that our customers don't have a lot of time, are passionate about the sport, and when they do have the time to work on it, want to work on it hard," Boyd said. "They tend to be someone who has a goal. Whether it's an executive who wants to go faster in his race league or a kid who's trying out for the race team, having a clear goal seems to be the most common element."

But as smartphone technology continues to improve, any instructor can quickly video a student, then—while standing

"I FIND THAT OUR CUSTOMERS DON'T HAVE A LOT OF TIME, ARE PASSIONATE ABOUT THE SPORT, & WHEN THEY DO HAVE THE TIME TO WORK ON IT, WANT TO WORK ON IT HARD" —JEB BOYD on the side of a run or while riding the lift—show them what they shot. The video or, in some cases, still photos provide visual reinforcement of any kinesthetic cues that the instructor has been trying to reinforce.

Jim Dougherty, a PSIA-certified ski instructor, has even developed an iPhone App called SNOW PRO, which allows instructors to compare side-by-side video so they can show students how they are improving, or what they want to aspire to next. He thinks that as the technology continues to evolve, it would be a mistake for instructors not to take the lead in harnessing it.

"Do we want to have our clients with this easy-to-use technology and our ski pros do not?" Dougherty said. "This would be like the skiing population moving to shaped skis and we continued the traditional straight-ski concept."

YOUTUBE YOURSELF

Just as shortsighted would be to think that all of this technology is just for the student, and wouldn't also benefit the instructor. Which is why, across the country, ski and snowboard schools—as well as divisional trainers—are using video to help improve how their instructors ski and snowboard, and also how they teach.

For years, PSIA-AASI's Central Division has been using video to help its examiners and clinic leaders ski and teach more effectively, and also as a way to help newer instructors quickly progress. According to Central Division's Education Vice President John Keating, video provides a unique opportunity to objectively evaluate oneself.

"It gives you the opportunity to see yourself as you are on the hill," Keating said. "We set the process up in such a way that you can compare what you're doing with what you want to emulate. But it's not just the video that makes the difference, because you're also talking to the video reviewer in a way that lets you be more sure about your video analysis, and what you want to work on next."

Keating said in terms of improving the level of instruction, Central also uses video to help instructors evaluate how they present to their peers, everything from how succinct they are to



Jeb Boyd offers keen analysis.



how clearly they share their knowledge. In the same vein, PSIA-AASI's *Entry Level Instructor's Guides* help new and returning instructors prepare for being in front of a class.

The two online tutorials (available at TheSnowPros.org) were created to provide a behind-the-scenes look at what it's really like to be an instructor—from the kind of training you'll need and work you'll do, to the sense of camaraderie and culture you can expect to share. This season, the guides are helping to prepare the next generation of teachers before anyone was even on the lifts.

"I think they are great tools for new instructors, because they present real-life situations that are easy to identify with, and that you can expect to encounter," said Mickey Sullivan, director of education and programs for PSIA-AASI's Eastern Division. "If I were running a ski school, I would tell everyone to watch them before they get on snow."

To access the *Entry Level Instructor's Guides*, go to TheSnowPros.org, open the "Publications, Videos & Resources" page, and click on the "E-learning Modules" link.

EXPANDING INTERACTION

PSIA-AASI has been building an even more comprehensive online resource in the form of the *Movement Matrix*. Featuring hundreds of short video clips of real-life skiing and riding situations, the *Movement Matrix* is like an ever-expanding top-end clinic of PSIA-AASI concepts.

Covering every discipline of instruction, with new clips for snowboard, cross-country, alpine, and adaptive instructors being produced and loaded throughout the year, the library of relevant material continues to grow. And PSIA-AASI Adaptive Team member Geoff Krill said that it is going to





ANOTHER DIGITAL DIMENSION

Want another example of how technology aids ski and snowboard instruction? Check out the digital edition of this very magazine—complete with helpful links and embedded video for this feature and more—by logging in at TheSnowPros.org and clicking on the "32 Degrees" link in the Publications, Videos & Resources tab. From there, click on the cover image for 32 Degrees.

be critical to the plan to provide more instructional content to all adaptive instructors. "Being able to effectively use video is going to be key to how much of an impact I can have in helping us grow, and how many people I can reach," Krill said.

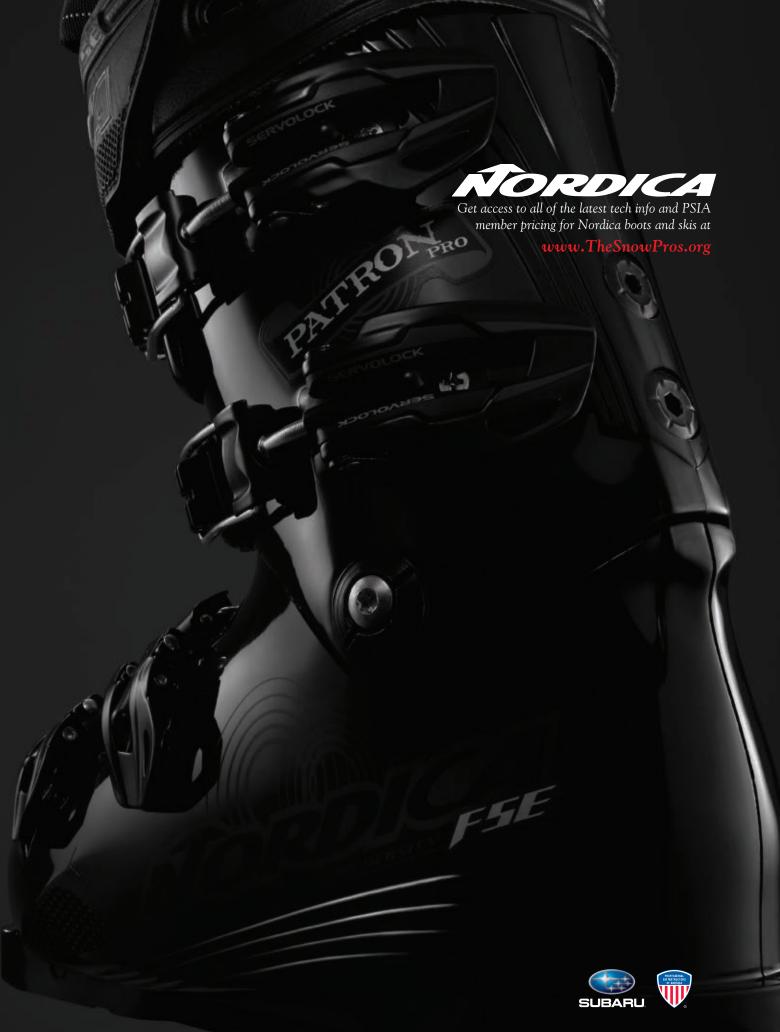
Video, however, is far from being the only technology having an impact on how instructors teach. Rocker and ski and snowboard design, as has been well documented here in 32 Degrees, continues to evolve, while social media platforms such as Facebook and Twitter provide more ways for teachers to interact with each other, and their students. The PSIA-AASI Facebook page has been one place buzzing with activity as more instructors find valuable ways to connect online. In the three months leading into the 2012–13 ski and snowboard season, the number of members sharing the online community jumped by more than 150 percent.

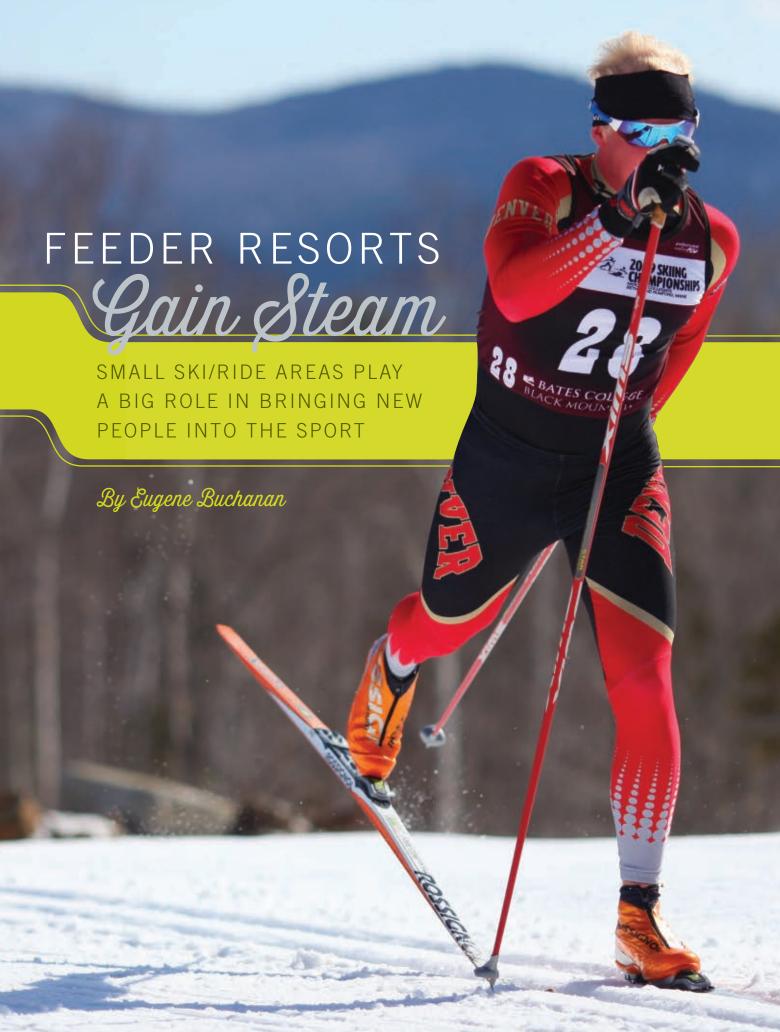
On a more tangible level, at ski and ride areas such as Copper Mountain and Steamboat in Colorado, the Flaik Global Positioning System has given ski school management another tool to improve the safety, and entertainment value, of their children's classes. "Right now we tend to use it more as a safety device," AASI Snowboard Team member Scott Anfang said of Steamboat's use of Flaik, which allows supervisors and concerned parents to monitor where the kids are on the mountain at any given time. Not only does the GPS tracking allow for classes to easily be found in order to deliver a message or a late student, but parameters can be set to issue a warning if one of the little riders gets too far from the rest of the class.

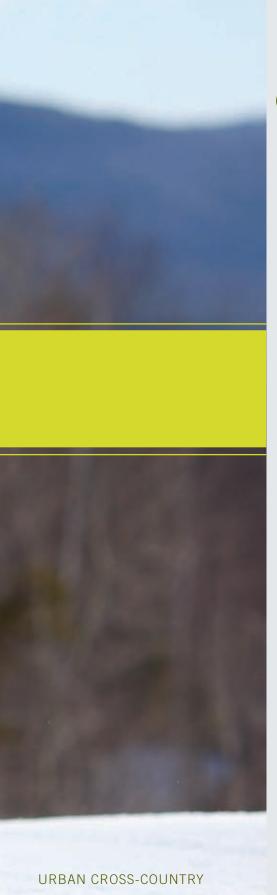
Beyond safety, some schools are also using Flaik as a way to create a visual memento for each student to see what they did in their class. "You can track the day and show an overlay of your runs over a trail map, and even see the speed and vertical you recorded," said J.P. Chevalier, who used to work at Copper Mountain and is now the director of snowsports at the Summit at Snoqualmie as well as a consultant for Flaik. "The technology at Flaik also creates a survey that can be linked to a guest or a parent, so we can get really specific feedback on how each lesson went."

With so many new toys and so much new technology, it could be easy to forget the all-important personal aspect that is at the root of each true teaching success. As PSIA-AASI Professional Development Manager Earl Saline said, "You can't rely on the technology to do the teaching for you. It's still person to person. The fact that our members are there with the guest, face to face, means that fundamental communication skills are still so important to what we do." 52°

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.







SKIING COULD HELP GROW

THE SPORT.

4

couple of years ago the case could've been made that small "feeder" ski resorts were going the way of the dodo. The triumvirate of rising costs, fewer skiers, and liability concerns conspired to make operating them a black diamond affair.

But all that seems to be changing now as mom-and-pop resorts are making a semblance of a resurrection throughout the country. And this spells good news for growing the industry—especially as it relates to introducing never-evers to skiing and riding and offering additional avenues for instructors to ply their well-honed trade.

"Anytime you can bring our sports to the public and make skiing and riding easier for people to try, it's great for the industry," said PSIA Alpine Team Freestyle Specialist David Oliver, who is a children's instructor at Colorado's Breckenridge Resort. "There's a reason all the skiing and riding expos are done in places like Houston, Milwaukee, and Chicago—they get more people involved."

While certain smaller resorts continue to struggle—California's June Mountain and New York's Big Tupper both recently closed—others are picking up the slack, employing a variety of business models to stay afloat. While the implications of these different methods vary, few can argue about the way they truly "feed" new people into the sport, providing the accessibility and first on-snow thrill to those who might not otherwise venture to a mega resort.

"They're a great way to give people a close-by place to get into the sport of skiing or snowboarding," said PSIA Professional Development Manager Earl Saline. "Not everyone has the ability to get to the Vails, Strattons, Lake Tahoes, or other skiing or riding meccas of the world. Feeder resorts make access to the sports far easier and more affordable for many families."

Plus, the bonus is that these people might become converts once introduced to sliding on snow. "Some people will outgrow those mini-hills within a couple of months, and then go on their first family ski trip somewhere bigger," said Oliver. "This type of progression is good for the whole industry."

The benefits of learning at a Lilliputian level can be realized on even the smaller hills. Oliver said that the new Frisco Adventure Park in Frisco, Colorado, has been hugely successful, with a lone Magic Carpet feeding a tubing hill and terrain park. Copper Mountain even hosts beginner lessons there. And when people are tubing, they see people right next to them having more fun, and control, skiing and snowboarding, sowing the seeds for them to want to try those sports as well.

"I think we'll start seeing a lot more of these feeder areas in places like the Midwest and New England," Oliver adds. "Especially when it comes to converting parks that are usually closed and don't get used in the wintertime into small facilities that let people try skiing and riding."

Their growth is also good for instructors. "They give instructors a way to easily share their passion," said Saline. "You don't have to have a gondola, six-pack, or high-speed quad to be a successful instructor. You can kick off your career at an area with a rope tow attached to the back of a tractor.

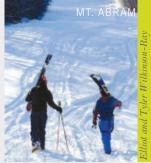
"Feeder resorts are huge for the industry," he added. "The bottom line is that they often make it easier to get into skiing and riding than it might otherwise be."

Following is a quick look at micro-scale resorts—both nordic and alpine (ski and ride)—that are charging forward with making skiing and riding more accessible to the masses, and in the process opening up new avenues to turn newcomers into lifelong converts.

ON TRACK WITH SKI DENVER

Not all small areas are focusing on alpine skiing and snowboarding. Riding the success of Denver's Ruby Hill Park—a free urban terrain park, complete with snowmaking, that opened in 2007—another Denver ski group is aiming to introduce a new cross-country skiing venue in the heart of the Mile High City. Calling themselves the Denver Nordic Ski Association, or Ski Denver, the group plans to develop a free, groomed, cross-country





"MANY OF THESE AREAS ARE STRUGGLING, AND WE WANT TO SHOW PEOPLE WHY THEY ARE WORTH SUPPORTING."

—TYLER WILKINSON-RAY

ski track through the old-growth trees of south Denver's Wellshire Golf Course by this winter, bringing groomed cross-country skiing to Denver for the first time in the city's history. The plan would mimic a similar trail system in neighbor Boulder's North Boulder Park, where a 20-year-old grooming program provides 20 to 30 days of skiing a year.

Organizers feel it's a sound plan that will do wonders to help grow the sport—and even its instruction opportunities—on the Front Range. The course usually has about 40 days a year when snow deters golf, so the group hopes to turn those lost golf days into bonus nordic days. Plans so far include raising funds to buy a snowmobile and other grooming equipment, and perhaps even snowmaking operations, by selling memberships and enlisting sponsors.

"The barriers to nordic skiing are inherently lower than other winter sports, and a publicly accessible venue in Denver will introduce new audiences to cross-country skiing and expand the sport," said Miles Graham of Ski Denver. "The immediate goal is to provide free public access and educate users about the sustainable use of public space. Our long-term goal is to create youth and instruction programs that further enhance this community benefit."

ECHO MOUNTAIN

Cross-country skiers aren't the only ones who will likely have more convenient locations in which to train and take lessons on the Front Range this year. A short drive from Denver, near Evergreen, racers will also have a new hill to train on. Tired of commuting to Vail for her four children's race training, Evergreen resident Nora Pykkonen purchased 226-acre Echo Mountain ski area in August and is converting it into a membership-based ski race training facility focusing on school-aged athletes.

"It will cater to age-class and FIS racers, and also have an all-mountain program," said Pykkonen, whose resort will also host racers training to compete for the University of Denver. "It will be great for helping people work on all the fundamentals."

The membership model is unique. Members pay a one-time initiation fee and then a yearly program fee based on the level of coaching they want. At the lower end, all-mountain program participants will meet twice per week, while age-class and FIS racers will train five times per week. A high-end World Cup program guarantees members a coach with World Cup experience, which currently include such athletes as Sarah Schleper-Gaxiola, Petter Brenna, Patrik Järbyn, and Mike Farny.

Pykkonen plans to invest \$5 million into the resort in coming seasons, expanding its 80 acres of 1,500 vertical feet of terrain. She's also added nine more snowmaking guns, built a Super G course and mogul lane, and installed two surface lifts that cut ride time from eight minutes to three. She's also planning to install a state-of-theart video tent for reviewing runs, create tutoring stations for kids, and develop a shuttle system for students in the region. "Training times will be offered after school, in the lights, to make it as easy as possible for kids in the region," she said.

MOUNTAIN RIDERS ALLIANCE

Membership models like the one planned by Colorado's Echo Mountain are popping up elsewhere as well. A group called the Mountain Riders Association (MRA) has created a new ski area model based on such membership, partnering with smaller resorts to

Supporting the Tiny Resort Cause

Among those carrying the standard for small resorts are brothers Elliot and Tyler Wilkinson-Ray, who are currently immortalizing small ski hills in Vermont with their new documentary The Story of Small Ski Areas. In the face of resort consolidation and 116 "lost" ski hills in Vermont, their goal is to call attention to many of the state's smaller ski hills that have served as ambassadors for the sport and helped it grow throughout the last five decades. In the film, they deftly showcase such small hills as Hard'ack, Northeastern Slopes, Cochran's, Suicide Six, and the Lyndon Outing Club as having a huge effect on and facilitating locals' passion for skiing and riding. "Many of these areas are struggling and we want to show people why they are worth supporting," said Tyler.

— Eugene Buchanan

FMFHIBIO

ROCKER NO COMPROMISE







GLEN PLAKE
ELAN AMBASSADOR
PSIA LEVEL III INSTRUCTOR
GENERAL SKI GOD





















offer economies of scale. Its mission: Support homegrown, sustainable ski areas, with a focus on affordable skiing and riding. Its most recent partnership is with Maine's Mount Abram, a privately owned, 1,150-vertical-foot hill 90 minutes from Portland, where the focus is on ease-of-skiing rather than infrastructure (owner Matt Hancock keeps ticket prices affordable to encourage local business). Partnering with MRA for its membershipselling and branding efforts may create a precedent to help smaller resorts compete against bigger operations.

MRA hopes to spread its grassroots system throughout the country by adding other smaller hills to its membership program, focusing on what it calls "ski areas underperforming with upside potential in an engaged community." Possible targets include areas like New York's Greek Peak and Maryland's Wisp Resort, which are now in bankruptcy proceedings, as well as such better-known hills like California's recently closed June Mountain and Snow King in Jackson Hole, Wyoming. Another goal is to establish a low-impact ski area on Alaska's Kenai Peninsula that would offer an affordable skiing/riding alternative for families in the Anchorage area.

DETROIT MOUNTAIN

Efforts are also underway in Minnesota to open up new terrain for never-evers. A group of PSIA and AASI instructors is trying to re-open a tiny ski hill called Detroit Mountain to boost participation in snowsports. The \$6.2 million effort is being spearheaded by the Detroit Mountain Recreation Area (DMRA), a non-profit that plans to open the resort for alpine skiing, snowboarding, cross-country skiing, and tubing in the winter; and camping, hiking, and biking in the summer. After operating for nearly 50 years, the ski hill closed in 2004.

One of the ringleaders is 18-year PSIA instructor Max Storch, who grew up skiing on the mountain. Having skied all over the country, he has seen resorts evolve from single- to multi-use formats, and feels it will suit the Detroit Mountain region well, while keeping the sport accessible and affordable. He's also keen to share skiing and riding with people who might not otherwise be able to try the sports—all while creating an economic boon to the region. "People who would never have gone near a ski resort might now bring their family and friends to go tubing, and then patronize area motels and restaurants," Storch told the Associated Press. "While this is good for the local economy, it's also good for skiing and riding. When they see someone else schussing down the hill and having fun, whether in a lesson or not, they might well want to try it themselves." E2°



"TRAINING TIMES WILL BE
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Eugene Buchanan has written about the outdoors for more than 20 years, from working the Beijing Olympics for NBC to writing for ESPN.com. A former business reporter and publisher of Paddler magazine, he has also been published in The New York Times, Men's Journal, Sports Afield, Outside, National Geographic Adventure, Forbes Life, Skiing, and other publications. His 2010 book Outdoor Parents, Outdoor Kids won the gold medal from the Living Now Book Awards.







Illustrations by Kevin Howdeshell

HERE ARE ALWAYS SURPRISES IN THE MOUNTAINS. FROM THE CHAIRLIFT YOU GLIMPSE A DELICATE CURL
OF SNOW THAT THE WIND CARVED OVERNIGHT. ON ANOTHER DAY THERE IS THE SUDDEN APPEARANCE
OF A STELLER JAY'S WHITE FACE AS IT FORAGES FOR FOOD. THEN THERE ARE THE DAYS THAT BRING
UNEXPECTED JOY BECAUSE YOU HAD THE GOOD FORTUNE TO GIVE A LESSON TO A STUDENT WHO TAUGHT YOU
SOMETHING NEW. HERE ARE NINE STORIES FROM PSIA-AASI MEMBERS THAT PROVE ON-SNOW INSIGHTS CAN
APPEAR WHEN YOU LEAST EXPECT THEM—AND FROM THE VERY PEOPLE YOU THOUGHT YOU WERE ENLIGHTENING.

SKIING SQUARES

When I was introduced to Kevin, he gave his age as four and three quarters. His father said that his son had skied before and could handle the bunny slope. To make sure that Kevin could stand up and do some reasonable turns, I took him to our Snow Hawk area, which is equipped with a moving carpet.

He could walk on skis, had a good stance, and did fine riding the carpet. At the top he pushed off confidently and did a nice wedge turn to a stop—but he had made no turns on his way down the mountain.

I let him know we would go to the Nutmeg Chair if he could show me how to turn as he went down the hill. I added that we want to make our turns like an S. "Let's do squares" he said. "This I have to see," I thought to myself. "You show me."

He led me up the moving carpet, turned right, and traversed to the same starting place. He went straight down the hill as before, no turns, and did something like a hockey stop at the bottom. He continued to the right and went back to the bottom of the carpet. "See," he said. "A square." I had to admit he was right.

"What's next?" I asked. "Pentagons?"

"No, I don't like them," he answered.

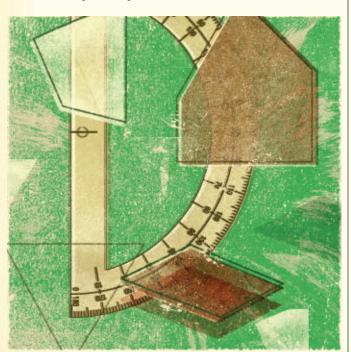
"Can you show me what you do like?"

"Come with me, Charlie," he said, and I followed him to the beginner chair.

For the remainder of the lesson Kevin demonstrated his vision of geometric shapes done on the snow. During these demos he showed me that he could do all the skiing basics that a novice should know. When we got to a polygon with a sufficient number of sides, he said, "Now, we've done a circle."

That day I realized that not all who bring a lot to the table are adults or ski instructors. Some are just four years and three quarters.

—Charles Chapman, Alpine I, Mohawk Mountain, Connecticut





NEW PERSPECTIVE

In my years of teaching all ages—from three-year-olds to seniors—one female student in her late 60s stands out in my mind. It would be appropriate to say that she completely changed my perspective about skiing.

This woman had never skied before, so in a private all-day lesson we started from ground zero in the Level 1 beginner training area of Northstar California. She learned rapidly, quickly developed the ability to stop, and was soon controlling her speed in a gliding wedge. We took the appropriate breaks, hydrating and resting, talking off and on all day long about the sport. By that afternoon she was comfortable using the lift, and we were able to make a good solid run on a gentle green slope. She was enchanted with the mountain and had "mastered" a skill that for all of her life she had wanted to try.

During the day she made many comments about how, when she was a young adult, women were not encouraged to ski. She said that when she'd visited resorts before, she'd been more of a care provider for the children who were there to ski, as well as a "cheerleader" for her husband and other members of the groups she accompanied. In that afternoon, I observed firsthand how the evolution of women's participation in sports has changed the world we live in today. We covered six decades of American History of Women's Sports that day.

This student said that conquering this goal in her senior years was one of the most significant accomplishments of her life—and this was coming from a person who'd built a very successful career in business. She had also evolved in the business world during the women's rights movement in the 1960s.

We change people's lives. We assist folks in carving memories that are forever ingrained as Joy, Accomplishment, and Success. What a great way to spend a day!

—Peggy McCullen Connor, Alpine I, Children's Specialist 1, Northstar California

LIFT, BOW, ENJOY

It is always difficult to find the right words that convey the right thought to people. But an Asian student I had summed up the way to put your weight forward while getting off the lift. He said to simply stand-up and bow. I haven't found a beginner student yet who does not understand this, and it always works.

—Tom Martella, Alpine II, Loveland Ski Area, Colorado





CUSTOMIZED SERVICE

Every student I have taught in 40 years of ski teaching has taught or reinforced that the one-size-fits-all template lessons don't work for long. Each of them has asserted their individuality, and challenged me to come up with a way to customize my ideas to their needs. That is really what keeps the challenge and adventure in teaching skiing.

—Sherman White, Alpine II, Smugglers' Notch, Vermont

DELIGHT WITHOUT A DICTIONARY

I think I get something back from my students in every lesson—including my training clinics. But one student does stand out. This six-year-old, second-day skier's name was Macy. She had a rough go with her parents getting her down a slope that was a bit above her head. She was not happy at all.

I've been known to lend assistance on the hill when I see someone really struggling and I was hoping to give Macy's dad some pointers to share with her, but it didn't work out. Incredibly, however, Macy ended up in a private with me later that day. I was elated!

Macy was a bit knocked-kneed and trying to control her speed in a fall line wedge. It wasn't working too well. I assisted her in getting up and helped her learn to round out her turn. We were on the chair when I talked about controlling her speed.

I said, "You know, skiing is really just about turning." Macy piped up through her little-kid goggles and missingteeth smile and said, "It's about funNESS too!"

FunNESS? I cracked up and realized how perfectly right she was. Macy put a smile on my face that day and re-grounded me. Skiing is just fun. What a great day.

—Andy Garza, Alpine III, Yosemite's Badger Pass, California







HOOKED

When the snowboard season ends I teach fly fishing for Orvis, and I learned an important lesson from one of my middle-aged students. This story begins at the end of a two-day training session conducted mostly in cold rain.

As we finished our wrap-up, one of the students approached me and said he was really glad it had rained throughout the program. I asked why. He said that before taking the class he never would have gone outside in the rain, but that at our suggestion he purchased rain gear, and over the two days he learned that you can have fun outside even if the weather is horrible—as long as you are prepared for whatever the weather throws at you.

His simple comment made me smile and think. And that philosophy has kept me going through the winter on many cold and windy days.

—Tom Buchanan, Snowboard II, Okemo Mountain Resort, Vermont

TEACHER, STUDENT, REBOOT

AJ is 14 and started spinning backside 360s with no problem after I got him to suck up his knees. "Looking" is a big part of spinning, as is shoulder and arm placement. I told him that. But AJ did a good job teaching me too.

Part of my advice was "When you hold your arms in you're going to spin, and when you hold your arms out you will slow down and be able to look for the landing." By watching him I noticed he was pulling his lead shoulder in and his back shoulder was kind of hanging back there making a small circular motion.



Flawlessly and consistently he started landing back 360 after back 360. By observing AJ I discovered why I was looking so sloppy on *my* backside 360s. By pulling his front or lead arm in he can move his head early and look as he gets his pop off the lip and spin off the toe edge. The back hand stays

slightly out over his tail for stabilization and to aid balance as he looks over the tail for the last rotation. This also creates a bigger window so he can see the landing.

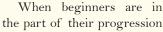
I was not doing this motion with my back arm. I had given AJ small tips that I had used to perform the same trick, but because of AJ's style I had picked up that little movement to improve my own riding. AJ perfected the trick before me. The instructor has learned from the student. I can now perform backside 360s with the same consistency.

If AJ had not taken a lesson with me he could have still learned the backside 360, slowly. I would probably have learned what I was doing wrong in performing my backside 360s if AJ had not taken a lesson. However, together we got to talk more in depth about the trick and perfect it. Collaboration—rather than one person's trial-and-error—will always help you get things done with faster progress.

—Mike Palombi, Registered, Chestnut Mountain Resort, Illinois

BALANCE DANCE

I often work with Wounded Warriors and noticed that you never see an amputee skiing with his or her weight in the back seat. Try skiing on one leg while leaning back, and you will see why.





when they walk around on one ski, I get them to glide on one ski, slowly, and try leaning back for a moment and then lean forward. This usually causes them to lose balance, and then get it back. I have them do the same exercise on two skis and point out that while they can get away with it on two skis, they should remember how unstable it was on one ski. This seems to stick with most of them better than any other way I've tried to keep students from leaning back. And I owe it all to those Wounded Warriors.

—Normand Renolds, Alpine I, Loveland Ski Area, Colorado

WHY MATTERS

What have I learned from my students? After almost 50 years of instructing, this can be best summed up whenever one of

my students asks me "Why?" Why is teaching a particular exercise important? Why has the teaching methodology and exam requirements changed over the last 30 years? (And when will it change again?)

The question of why challenges the instructor to justify his or her teaching approach,



and apply the why (a.k.a. "the answer") to the student's cognitive and physical abilities. Taking that approach, the instructor will always remember the student and learn from the lesson. [22]

—Gary S. Nelson, Alpine III, Bottineau Winter Park, North Dakota





In this world of words in which we live, what we say is often less important than how we say it. Our lives are a riddle wrapped in a semantic enigma.

This might explain why ski and ride schools everywhere, and in the East in particular, have had a hard time getting advanced and expert guests to come back to class. In the mind of the expert skier or rider with an unshakable belief in his or her skill, traditional ski-school nomenclature can be a prohibitory red flag. Words like "lesson," and "instructor," tend to connote elementary or remedial education, implying technical deficiencies in the minds of potential clients. The advanced skier or rider mulls over those words and may think, "Lesson? I'm a skiing (or riding) stud. I don't need to go back to 'school.'"

Recent stats from the National Ski Areas Association paint a pretty discouraging picture. While advanced and expert skiers and riders represent an increasing share (now 43 percent) of the snowsports-participation pie, they represent just four percent of lesson participants. Perhaps this explains why resorts seem to have all but thrown in the towel in bringing this demographic back to school. An informal survey of Eastern areas conducted for this article turned up surprisingly few programs oriented toward the advance/expert crowd. Why waste any effort courting a population inclined to cold-shoulder you anyway?

That said, this seems to be primarily a guy thing, especially in the East, lacking Western big-mountain or big-snow challenges sexy enough to entice expert guys to seek help and guidance. While the male ego might shudder at the thought of being subjected to the perceived humiliation of instruction (and perhaps turned off by the misconception that Eastern terrain is too docile or humble), clinics and camps for skilled women abound. At least a dozen major Eastern areas offer special women's programs, and they do quite well.

For example, Loon Mountain's women's performance camps and its once-a-year Droppin' In freestyle camp for advanced woman skiers usually fill up, according to Marketing Director Molly Mahar, and often have waiting lists. Yet Loon has no men's equivalent, says Mahar. "I'm not sure it would work with men. Men don't seem to feel they need the camaraderie that women thrive on."

But there may also be a cart-and-horse scenario at play here. Advanced and expert skiers and riders might not be coming back to school because schools don't offer enough to address their needs or interests. Consider a reverse *Field of Dreams* paradigm: Build no program and they won't come.

Which brings us back to the semantic issue. Advanced/expert programs that have succeeded typically do away with "lesson"-oriented verbiage and replace it with more manly terms. "Camps" run by "coaches" may soothe the male ego more effectively than "classes" run by "instructors." "Tours,"

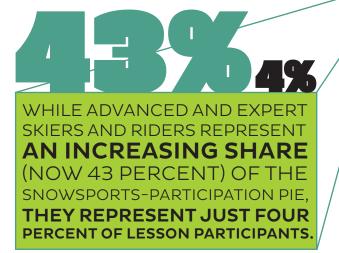
"clinics," "adventures"—terms that suggest anything *but* school probably stand a better chance of succeeding.

Two Eastern resorts that have had success in courting experts with this kind of strategy are Sugarbush, with its Bush Pilots program, and Sugarloaf, with its Glade Tours program.

Let's look at the Bush Pilots program first. While it operates under the aegis of the Sugarbush ski school, it is the brainchild of former extreme-skiing great John Egan, who is less concerned about technical perfection, he says, than in overcoming daunting terrain challenges with "linked recoveries."

What Egan and his Sugarbush team cooked up seven years ago was a program in which grown-ups, after dropping off their kids in the morning at ski school, could enjoy a day of fun and games, just like their kiddos, for four mid-day hours. The Bush Pilot leaders coach their clients rather than instruct them, according to Egan. To distance themselves further from the kind of trappings that can scare experts away, they eschew ski-school uniforms in favor of a free-skiing look. While they still wear garb that makes them easily identifiable as team leaders, the uniforms represent a giant step away from any appearance of pedagogical orthodoxy.

Once groups are formed—a maximum of seven clients per coach—the operative mandate is simple: ski. "These are people who can't get free of the (skills) plateau they're on, but



they don't want to give up a day of skiing (for instruction)," says Egan. "The main thing they want is not to stand around. They want to ski, ski, ski."

And ski they do. Egan and his coaches focus on "keeping the group moving and making it fun, not necessarily technical." Terrain management, rather than technique, are what Bush Pilot sessions are primarily about. Egan doesn't stress a "right

way" to ski—"what matters is that you make the run and don't hit a tree or a rock or whatever." Bush Pilot coaches also try to get inside their clients' heads; instilling the confidence to handle any terrain, with whatever personal style works best for any one skier, is at the heart of the program.

"It's still geared toward learning," says Egan, "but we stress that skiing is a freethinker's sport. These are people who have enough rules during the week at work." In the end, clients ski themselves into a state of near-exhaustion, Egan says, after which there is usually some post-skiing, extracurricular video analysis.

Like Sugarbush, Sugarloaf is a bit sneaky in enticing too-cool-for-schoolers to come back for a little instruction with its guided Glade Tours. These are very much "tours" led by "guides," says Tom Butler, Sugarloaf's ski and ride school director. "But it's a great opportunity to slide in a little (instructional) info."

That said, the impetus behind the creation of the Glade Tours was not necessarily an effort by the Sugarloaf ski school to attract more advanced and expert skiers (and riders) back to class. In fact, two factors converged to inspire Butler and his team.

First came the opening of Brackett Basin, a 405-acre sidecountry area that is part of a long-range expansion of Sugarloaf's terrain. Featuring glades and other off-piste terrain eccentricities (cliffs, chutes, powder, etc.), Brackett







Basin presents challenges unfamiliar to many Eastern skiers. Once Brackett Basin opened, the Sugarloaf ski school sensed a demand among expert skiers and riders to learn more about meeting the new challenges the terrain presented, and the Glade Tours program was born.

As in the Bush Pilots program, Glade Tours clients aren't necessarily focused on honing basic technique. While technique tips, especially in dealing with powder or ungroomed snow in tight quarters, are certainly part of any tour, many other components come into play. Terrain management, safety, and glade etiquette are also important parts of the mix, says Butler.

Once they are part of a tour group—five to six skiers and/ or riders is the typical number—and head off-trail, clients typically "let their guard down," says Butler. They become more open to suggestion, at which point there is "a focus on what you do well, and we build on that."

One of the challenges in developing the program, says Butler, has not just been guiding and instructing clients; special training for instructors has also been necessary. Sugarloaf has an open boundary-to-boundary policy—anything within the resort boundary that isn't marked as closed is fair game—and Glade Tours guides must start with a complete familiarization with what is out there. After that, an instructor must not only possess the specific skill set for dealing with off-piste terrain and conditions but must also be





sensitive to the idea that a "tour" client might have different objectives than a regular-lesson client.

MOVING IS VITALLY IMPORTANT.

So what can we learn from the models of the Sugars? For starters, both ski and ride schools recognized opportunities presented by their specific terrain and personnel. Both Sugars also happen to be blessed with exceptional terrain for advanced and expert skiers and riders.

Not every area in the East, of course, has those kinds of assets to work with. But it is instructive for any area to assess its terrain and personnel and the particulars it might bring to the table for more skilled skiers and riders. Glades, steeps, moguls, terrain parks, off-piste powder, racing slopes, whatever—almost every area has a particular niche it is either known for or can tap into. If so, building a program from there might then involve creating a subset of instructors (or guides, or coaches) to address those particular challenges and the skill set required to meet them.

Also noteworthy in the Sugars programs is that once enrolled, advanced/expert clients are willing, even eager, to seek instructional tips. The trick is busting through initial, too-cool-for-school barriers. The Sugars have done this successfully through semantic retooling as well as a fresh look, with non-regimented uniforms. This also helps stroke the ego of the resistant male expert, who can see special language and special dress as elements to differentiate what he is doing from the regular ski-school hoi polloi.

Finally, while advanced and expert skiers might not shy from instructional tips once they are a part of a program, their main objective is to ski. While stopping on the hill for traditional demo-cum-critique sessions might work for skiers up to, say, Level 7, at levels above that keeping things moving is vitally important. "We talk on the lift," says Egan.

One thing is certain: the riddle of getting experts to come back to ski school is unlikely to be solved by using the same lesson model that works for other skill levels. Advanced and expert skiers and riders tend to think they are special. They don't want to stand in a morning lineup shoulder to shoulder with a bunch of never-evers. So treat them special. Treat them differently. Build them their own field of dreams, and they just might come. \mathbf{M}^{2}

Peter Oliver is the author of six books and has contributed feature articles to many national publications, including SKI, Skiing, Powder, and Outside. He is a PSIA-certified Level II cross-country instructor who works at Ole's Cross Country Center in Warren, Vermont.

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WHAT IS GOOD SKIING? ALPINE TEAM TAKES IT BACK TO THE BASICS

By PETER KRAY

hen the U.S. Ski and Snowboard Association (USSA) hired PSIA Alpine Team Captain Michael Rogan as fundamental skills development coach in September, it did so with a clear mission in mind—to focus on the basics of good skiing.

"One of the key factors we identified for future success was greater emphasis on younger skiers learning the very basic fundamentals of skiing—not just ski racing," USSA Alpine Director Patrick Riml said in a statement announcing Rogan's hiring. "As a PSIA leader, Michael has had a profound impact on our women's national team athletes from project work he has done in camps at Mammoth Mountain. We'll now be able to extend that support to our top development athletes in regions across our entire country."

USSA Executive Vice President of Athletics Luke Bodensteiner told 32 Degrees, "We have been building programs that dive deeper and deeper into development, but still realized that with all of the focus on racing gates, maybe there wasn't enough focus on what good skiing is, especially in regards to creating better fundamental skills. Bringing Michael in will not only help us establish good fundamentals, but also send the message to race programs across the country that this is important."

When it comes to addressing just what the building blocks of good skiing are, Rogan won't be alone. That's because defining the basics of good skiing in



American Tim Jitloff competes in the men's Giant Slalom at the Audi FIS Alpine Ski World Cup on October 28, 2012, in Solden, Austria.

everything from racing to freestyle to powder to the groomed has already been identified as a key focus of the new PSIA Alpine Team as a whole. And what Rogan is working on with PSIA will also carry over to his work with the U.S. Team.

"There are fundamental technical needs in everything you do, and we need to be clear about what those are," said Alpine Team Coach Rob Sogard, adding that the rapid innovations in ski equipment and the kind of terrain people are skiing has only broadened the examples people may consider when they think of good skiing.

For instance, Sogard points to what additional elements to the Skill Concept's components of balance, edging, and pressure might be relevant to today's skiers, especially in light of the way rocker technology continues to alter the manner in which skiers initiate turns in different conditions. One early frontrunner is the need for an athletic stance, in any type of terrain or any style of skiing. Of course, it won't be until the Alpine Team gets further into its examination that the full scope of potential new tenets—and how to apply them in the context of any given lesson—will begin to take shape.

"The second part is how we take those fundamentals and expand them to any possible kind of gear, attitude, or situation that we find across the mountain with the guest," said Sogard. "If we make the focus on fundamentals even tighter, then it should be easier for us to expand it to

itchell Gunn/ESPA



Hannah Kearney throws a heli-mutegrab on her bottom air at the World Cup moguls at an Olympic test event at Cypress Mountain, British Columbia.

wherever we may go in the next couple of years."

In some ways, it may seem as if skiing has exploded in so many different directions—from big-mountain dive-

bombing to halfpipe aeronautics to just clean form on the groomers—that it needs its own version of the Y Model. AASI's breakthrough methodology (see page 48), which starts all students down the same basic path, the Y Model is still versatile enough to help those students build the skills they need to become freeriders, freestylers, or hard carvers—or all three if they want.

"I think the Y Model analogy works because what the Alpine Team is intent on is coaching good solid fundamentals that people can use for a lifetime of skiing," said PSIA-AASI Professional Development Manager Earl Saline. "It's not about learning one technique when you start and throwing it away later; it's about learning skills that work from beginner to expert. I'm excited about working with Rob and the team as they consider what fundamental movements need to apply across the board, whether it's park and pipe or the development of someone who wants to take the competitive racing route. The roots of what a skier is doing on the World Cup or at the X-Games should

track all the way back to what he or she was working on the very first time that person went skiing."

Of course the last time the differing talents and techniques of both alpine racing and freestyle skiing were at such equal points of ascendence in the U.S. (i.e., in the early 1970s) helped create what many consider to be American instruction's signature moment, the introduction of the aforementioned Skills Concept. A mix of four critical elements—balance, edging, rotary movements, and pressure control—for decades these "skills" have been applicable to racers and hot doggers alike, and have simplified and streamlined instruction.

But have things progressed so far that even the Skills Concept might get a second look? David Oliver, now a second-term Alpine Team member and the original freestyle specialist on the team, says that when you've got people skiing backwards at 50 miles per hour, and rocker design now appears in beginner skis and hardpack carvers, it's worth reconsidering everything.





"It's something that we certainly touched on with the last team, the idea that good skiing is about the ability to make a choice about where you want to go at any moment—whether it's forwards or backwards or in the air, or moving down a race course at 70 miles per hour," Oliver said. "It's about having an equal amount of effectiveness and efficiency, and where can we improve that effectiveness overall."

Oliver said that addressing the Skills Concept should be included in that "effectiveness" focus. But even more than that, he said, is the idea that what the team is really looking at are all of the ways instructors can provide more resources for every type of skier on the mountain.

"With all of the different styles of skiing that we are addressing, I think there are a lot of opportunities here that do take us back to the same basic idea of the Skills Concept," Oliver said. "This is about how we can best show people what they are doing right, rather than correcting them on what they are doing wrong."

It's easy to sense more than a little anticipation about the possibilities, as if all the innovations in equipment and the sense of energy and potential surrounding skiing right now are giving members of the 2012–16 Alpine Team an opportunity that's all their own. After all, they get to take the building blocks of the profession and start applying them to a future we can only imagine.

"It's based on the idea that the building blocks don't change, but what we want to do with the tool—or, as we've seen with the rapid pace of ski design innovation, the tool itself—may change," said PSIA Alpine Team Member Jeb Boyd. "So it's really about executing those building blocks to then be able to produce the desired outcome."

For his part, Sogard said he can't wait to get started, and thinks he has the perfect group of players to address all of the angles of good skiing. "Everyone on this team is gifted as an instructor and very open to seeing where skiing is going to be in five years, which I think should be the role of the team. Our goal should not be to perfect what is current, but to help lead where the sport is going." §22°

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 ENDURING LEGACY—AND RELEVANCE—OF THE Y MODEL

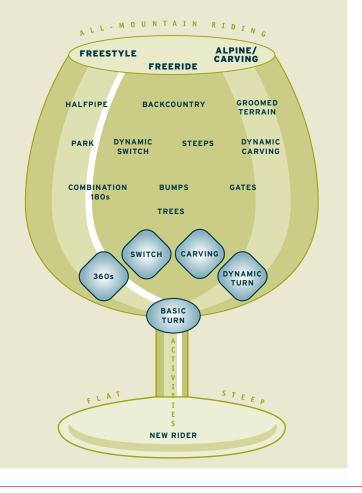
The Riding Model, or Y Model as it's sometimes called, remains one of AASI's earliest and most lasting contributions to snowboard instruction. Simple, yet effective, it identified a basic skill set that would benefit all new riders, whether they eventually wanted to ride the halfpipe, carve the groomed, or go freeriding.

"The idea was that there are some steps until you learn to turn, but once you can make that turn the world is open to you," PSIA-AASI Chairman Eric Sheckleton, who was part of the AASI Snowboard Team that developed the model, said in the book *American Snow: The Snowsports Instruction Revolution.*

As stated in AASI's Snowboard Instructor's Guide, "All the elements of the Y model—the compilation of all that is snowboarding—can be summed up within riders themselves. To better understand the mechanics of what happens while riding, we can look at two different aspects of any rider: movement concepts (or what the rider is doing) and performance concepts (or what the board is doing as a result of the rider's actions and/ or terrain). Snowboard teachers need to be well versed in both movements and performance. Each action has a reaction in the board. Understanding how the two are integrated is the key to snowboard teaching."

"For instructors who had a bias toward carving or freestyle, this still put them on notice that building a solid rider is the number one thing you're doing," said PSIA-AASI Professional Development Manager Earl Saline. "Even if that rider isn't sure yet where and what they prefer riding."

Peter Kray







FOR WHOM THE BELL RINGS: CONCUSSION & COMMON SENSE

By MICHAEL A. PATMAS, M.D.

n February 2011, Lindsey Vonn announced that she was pulling out of her remaining events at the World Championships after she suffered a concussion during training in Austria the week before and was not her normal self during the opening events. "I'm skiing in a fog" she was reported to have said. Despite the concussion, she finished seventh in super-G, pulled out after the downhill portion of the super-combined, and took silver in the downhill. She did, however, miss the giant slalom and slalom, plus the team event.

HUTT, HUTT, HUTT

Vonn's concussion came on the heels of a flurry of publicity that descended on professional football after a number of high-profile head injuries to several players, including Green Bay Packers quarterback Aaron Rodgers. The NFL has tightened the rules in an effort to discourage helmet-to-helmet hits. Despite concern about such hits in college football when Oregon State running back James Rodgers (no relation) was knocked unconscious by Boise State's Winston Venable after a helmet-to-helmet hit, the NCAA hasn't taken as definitive action as the NFL has.

Why the sudden interest in the consequences of repeated concussions? It's the result of new research that produced some startling results. As reported in a November 2010 Sports Illustrated cover story on concussions, studies that make use of sensors implanted in helmets show that football

players regularly sustain helmet-to helmet impacts that exceed the force required to produce brain injury. What was truly alarming was that these impacts were a routine part of the contact in the game and not recognized. But these concussive impacts don't just produce acute injuries; it is now evident that repeated concussions produce a form of long-term brain injury known as CTE or "chronic traumatic encephalopathy."

PROTECT YOURSELF AT ALL TIMES

It has been well established that repeated concussions and low-level head injury can produce long-term brain injury. CTE has been diagnosed in many retired professional football players, and it is now feared that college and even high school players are sustaining low-level chronic head injury.

The connection between chronic lowlevel brain injury, repeated concussions, and post-traumatic or chronic traumatic encephalopathy was first recognized in boxers. In a landmark study published in 1973, Professor J.A.N. Corsellis led a team of researchers who studied the brains of retired boxers and described a specific pattern of brain injury. In a 1981 article I wrote for Clinical Research: The Journal of the American Federation for Clinical Research, I reported a unique form of brain injury in boxers and suggested that a similar pattern might be found in children who suffered repeated blunt head trauma or shaking.

So now football joins boxing as a sport in which chronic low-level head



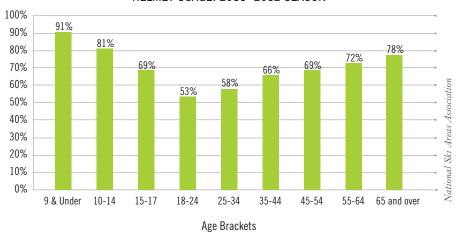
injury can lead to long-term brain injury. But what does any of this have to do with skiing?

RACER READY

Helmet use in skiing and snowboarding has become very popular over the past 20 years, and the FIS and USSA requires their use by ski racers. According to the National Ski Areas Association, as of the 2011-12 ski season, 67% of *all* skiers and snowboarders are wearing helmets, as are 77 percent of minors and 91% of children age 9 and under. Increasingly, some resorts are even requiring instructors to wear helmets.

Why are so many skiers wearing helmets? It's not because of a concern about repeated low-level head trauma, because that injury has not been described in skiers, yet. Rather, I believe

HELMET USAGE: 2011-2012 SEASON



most folks who wear helmets do so because they know about the potentially fatal kinds of acute head injury—such as subdural, epidural, and intraparenchymal hemorrhages.

However, with the new information about chronic low-level head injury and its long-term consequences, could it be that skiers are at risk as well? The type of injury sustained by Vonn, if repeated often enough, is the same kind of injury that has been shown to produce CTE in boxers and football players. So theoretically, a skier who sustains multiple concussive brain injuries could be at risk for chronic traumatic encephalopathy.

There is enough evidence now to suggest that helmets do offer at least some protection from acute injuries. And there's no denying that helmets (and goggles) offer protection against minor injury from head/facial lacerations from up-close encounters with tree branches and rocks—and many a terrain-park user has thanked their lucky stars that a helmet kept them from *seeing* stars after a trick gone awry.

The fall that produced Vonn's concussion would probably have done far more damage if she had not been wearing a helmet, but whether or not they offer protection against chronic brain injury is unknown.

USE NOT UNIVERSAL

The use of helmets in skiing and riding, which—according the National Ski Areas Association—has nearly tripled over the past 10 years, is not universally accepted. Many instructors prefer not to wear them. Indeed, helmets are a frequent topic of conversation at our lineups. It wasn't long ago that one of my colleagues stated, "I have been skiing for 47 years and I haven't hit my head once." Another opined that ski helmets offer little or no protection at the speeds at which we ski and that





DOT (Department of Transportation)-certified motorcycle helmets would be a better choice.

Despite the growing popularity of helmets among instructors, there is a significant contingent that continues to eschew their use. In the context of concussions, it's important to note that ski and snowboard helmets protect against blunt force, but they are not designed to specifically guard against the "shaken head" nature of a concussion.

Recently, I had a student who asked if she should rent a helmet. She had been told at the rental shop that it wasn't necessary. But she clearly was concerned. It turned out she was an ICU nurse and, by asking twice, it was clear to me that she was worried. I advised that she should rent the helmet and took her back to the shop to get one.

NOT DISCOURAGED

So what should instructors do about helmets? Obviously, when on the

company clock, instructors need to follow resort policy. When skiing or riding on their own time, wearing a helmet is a personal choice that should be respected.

If your students ask whether or not they should wear a helmet, it might be because they are concerned and are looking to you for expert advice. My preference is to use common sense and not to discourage helmet use. NSAA recommends helmet use, but stresses that skiing and riding safely is the key to preventing injuries.

Although we may not fall very often, our students might. I tell them racers

HEADS UP! CONCUSSION-PREVENTION LAWS IMPACT SKI SCHOOLS AND RACE TEAMS

BY DAVE BYRD

The growing outcry over concussions and head injuries in organized sports, particularly among student athletes, has focused attention on football programs around the country. While the spotlight has caught the National Football League in its harsh glare—including a class action lawsuit brought by former players over the NFL's perceived failure to protect players from concussions—Lindsey Vonn's concussion during the 2011 World Championships, forcing her to withdraw, has implicated the world of skiing as well.

Indeed, in the past three years, nearly every ski state has passed legislation establishing protocols for managing concussions in organized youth sports, which may impact ski schools and racing programs. Since Washington became the first state, in 2009, to adopt concussion legislation, 41 states—covering the vast majority of ski areas in the country—have enacted laws requiring coaches and sports officials to be trained in concussion prevention and detection. In the remaining ski states without youth athlete concussion laws—Montana, Nevada, Ohio, and West Virginia—legislation is pending.

While the actual laws vary, most contain three important elements: athletes must be removed from play if they are suspected of having suffered a concussion; athletes are required to obtain written medical authorization before returning to physical activity; and concussion education and training is required for coaches, parents, and athletes.

Concussion legislation is largely directed at sports programs organized through school districts, but because each state's statute differs in its wording and applicability ski and ride areas should scrutinize their state's statute to determine if their resort's ski

school or race club is governed by that state's concussion statute. In general, most do not appear to sweep resort ski schools within the jurisdiction of these statutes, but race clubs and ski teams are more likely than ski schools to be subject to them.

For example, in Colorado, while the concussion law focuses primarily on interscholastic sports programs, it states that "[e]ach private club or public recreation facility and each athletic league that sponsors youth athletic activities shall require volunteer coaches . . . to complete an annual concussion recognition education course." The Colorado law does not directly extend to ski school programs, but coaches involved with racing and club programs appear to be subject to the law for purposes of mandatory concussion detection and prevention training. Both Vermont and New York's concussion laws, however, apply only to youths involved with interscholastic sports programs or sports occurring on school district property.

When Utah enacted concussion legislation in 2011, the racing and club programs under the United States Ski and Snowboard Association (USSA), based in Park City, became subject to that state's law. As a result, coaches and officials with USSA's 450 clubs at ski areas around the country now have the legal responsibility to remove young athletes with suspected head injuries from competition and training.

While many of the concussion statutes may not directly apply to ski schools and race clubs, concussion prevention is at the forefront of many parents' minds when they enroll their children in such programs. To be sure, concussions resulting from skiing or snowboarding are extremely rare—and even more so in the context of beginner lessons—but the risks exist nonetheless. And in light of the visibility of the issue of concussions and youth sports, it is likely to be a concern for many soccer moms with kids who ski or race.

In an effort to be proactive, some ski areas and ski centers have voluntarily adopted aspects of their state concussion laws in an use helmets and, most of the time, so do I. I explain that a helmet will reduce the risk of injury but it doesn't offer a guarantee. What I would *not* do is actively discourage helmet use among my students or fellow instructors. 22°

Michael A. Patmas, M.D., is chief medical officer at California's Woodland Healthcare and a PSIA-certified Level III alpine instructor at Squaw Valley, California.

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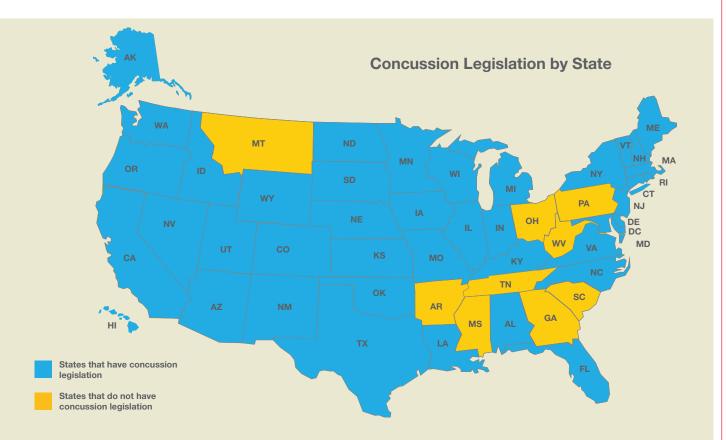
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For more information on trends in helmet use, see "NSAA Helmet Study Reveals Record Snowsports Helmet Usage," which is posted in the Web Extras at TheSnowPros.org. Just open the "Publications, Video & Resources" page, then click on the Web Extras link in

the drop-down menu for 32 Degrees. Other resources for information is the "Safety Programs" page on NSAA's website, NSAA.org, and LidsOnKids.org.



effort to be out in front on this issue and are having some instructors, race coaches, supervisors, patrol, and other employees go through the concussion detection and prevention training (which, in many states, can be done online). It should be noted, however, that under the current fifth edition of National Ski Patrol's *Outdoor Emergency Care* manual, concussion diagnosis is not part of that training regimen for patrollers.

Even if a state concussion statute does not directly apply to race teams or clubs, resorts may want to have their race teams or clubs adopt written concussion protocols for removing an athlete from competition or training following a possible head injury. This written policy could be shared with parents, and would also serve to help educate parents and their children on the risks related to concussions and head injuries.

Similarly, many ski school programs and race clubs are revisiting their helmet policies. Increasingly, race teams and clubs are requiring participants to wear helmets, and some ski schools around the country are requiring minors to wear helmets in ski lessons.

These may be low-cost ways to illustrate to concerned parents an area's proactive measures and broader commitment to safety, and may reduce any potential exposures from hosting competitive youth skiing or instruction programs where concussions and head injuries are a potential risk.

Dave Byrd is the Director of Risk and Regulatory Affairs for the National Ski Areas Association.



PSIA-AASI WEATHERS THE WEATHER

By ED YOUNGLOVE, PSIA-AASI TREASURER

o one would have foreseen the impact of weather during the 2011–12 season as wild variations in snowfall contributed to the worst overall year for the ski and snowboard industry in 20 years. Combine this with the general state of the economy and you might think PSIA-AASI would be in a difficult situation. Instead, PSIA-AASI finds itself in much better financial shape than expected, and with a bright outlook for the coming season. A few highlights:

- ♦ New fundraising initiatives jumpstarted the PSIA-AASI Education Foundation, highlighted by receipt of a \$200,000 grant.
- ◆ The grant enabled the association to offer the Movement Matrix free to members, increasing the number of users from 1.351 to 6.696.
- ◆ For the fifth year in a row, PSIA-AASI membership set a record—with the numbers for 2011–12 coming in at 31,716.
- ♦ The PSIA-AASI Professional Development Department distributed education materials to thirty-three 501 (c) 3 adaptive programs, reaching 3,682 volunteer instructors.
- ◆ The association continued its support of the annual Learn to Ski and Snowboard Month, with organizers of the January event reporting \$4.1 million in media value and 100,000 lessons given through the program.
- PSIA-AASI financed meetings of divisional representatives to develop or update certification standards for nine disciplines.

These examples are the tip of the iceberg when it comes to working on your behalf, made possible by the hard work and dedication of the national board of directors, volunteers, professional staff, and our remarkable members.

The primary goal of PSIA-AASI is to get people excited about snowsports, enabling you to develop both professionally and personally so that you can offer the best experience to your guests. We do this by ensuring we are the first place you come for information about snowsports, teaching, and the industry. We provide your connection and access to people, resources, and ideas that fuel your passion for teaching.

FINANCING MEMBER PROGRAMS

PSIA-AASI exists to provide programs that support you, the member, and we need resources to do so. The following summarizes information available to me as the association's treasurer and, thus, I pass it on to you.

It is drawn from an independent auditor's consolidated report of PSIA-AASI and the PSIA-AASI Education Foundation (the Foundation) for the 2011–12 fiscal year that began July 1, 2011, and ended June 30, 2012. All figures show combined gross income and expenses for PSIA-AASI and the Foundation. The accompanying financial charts may help you understand the following discussion about how revenue is generated and distributed.

REVENUE

Revenue for the 2011-12 fiscal year was up 3.4% from the previous year: \$3,502,960

in 2011–12, compared to \$3,386,468 in 2010–11. These figures reflect gross revenue to the association.

Non-dues revenue accounted for 56 percent of PSIA-AASI's total income. This means the membership contributed 44 cents for every dollar of the associations' income. The remaining 56 cents was generated through sales of catalog items (19 cents), sponsorship revenue (17.5 cents), advertising (2 cents), and education seminars (6.7 cents). Interest and miscellaneous revenue represented 5.2 cents. Grant funds released from restriction represented the biggest change—5.6 cents compared to the historical 0.4 cents.

The board of directors feels it is important that the organization's income activities reflect our values and that nondues income remains tied to the activities of the membership. Some examples of those income sources include specially priced merchandise available through partnership programs and the Accessories Catalog, educational materials, and activities like PSIA National Academy, AASI Rider Rally, and the promotion of the value of membership to area management, suppliers, and the public. Because of the value we offer, instructors voted with their checkbooks in record numbers to be members.

EXPENSES

Out-of-pocket expenses in 2011–12 included general operating costs as well as the costs of publications, marketing, the cost of catalog goods sold, insurance, committees and education programs,

training programs, teams, research and development, legal and accounting activities, and member services. Those expenses were held in check, increasing only \$8,574 from \$3,388,977 in 2010–11 to \$3,397,551 in 2011–12. That's a one-quarter of one percent increase.

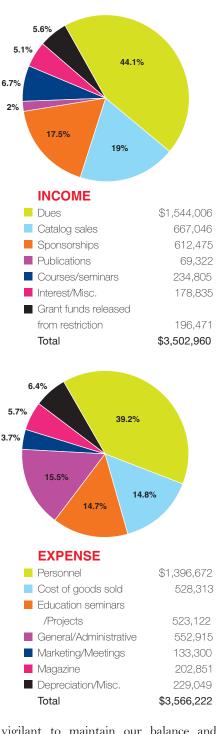
All of PSIA-AASI's expenditures support the association's overall educational and promotional goals—and our fundamental commitment to serve members—by carefully directing those expenditures to address membership needs at the divisional, national, and ski area levels. Key to this is the association staff, which enables development and delivery of educational products, events, and programs; supports the work of our committees and teams; and raises nondues revenue, including sponsorship and the aforementioned grant.

Expenditures—broken down as a percentage of each dollar spent—were as follows: personnel (39.2 cents), cost of catalog goods sold (14.8 cents), education seminars and programs (14.7 cents), marketing and meetings (3.7 cents), general and administrative expenses (15.5 cents), association magazine and editorial (5.7 cents) and miscellaneous (1.7 cents). Depreciation is a *non-cash* item that is added back in to overall expenses. Adding \$168,671 in depreciation—accounting for 4.7 cents on the dollar—raises overall expenses to \$3,566,222, only \$3,780 more than in 2010–11.

THE BOTTOM LINE

PSIA-AASI operations generated positive cash flow of \$138,128 as of June 30, 2012, and ended the fiscal year with cash gains of \$48,145. Overall, the association finished the year with a net loss of \$54,733, all of which is due to depreciation (again, a non-cash item that impacts assets as opposed to cash out of pocket). Total assets—otherwise known as member equity—increased from \$3,377,683 in 2010–11 to \$3,416,604 in 2011–12.

The associations' continued stable financial health is due largely to the efforts of volunteers and the hard work of your board of directors and staff, keeping PSIA-AASI moving in the right direction. As the cost of doing business continues to increase, we must remain



vigilant to maintain our balance and structure in support of you, the member, and our mission as professionals to all stakeholders in the ski and snowboard industry. \mathfrak{Q}°

If you have questions or would like a copy of the 2011–12 independent audit, please write to: Ed Younglove, Treasurer, PSIA-AASI, 133 South Van Gordon Street, Suite 200, Lakewood, CO 80228

Alternatively, you can send an e-mail to: treasurer@thesnowpros.org.





Hone Your Sensitivity to Challenges Not Readily Apparent

By MARY JANE DOERR

ave you ever skied where you were unfamiliar with the language and couldn't read the trail markers? Friends and I had such an experience. Not understanding the signs, we ended up on an off-piste trail, only to find out later the area was closed because of wolves.

While the experience provided a funny story to tell afterward, it also helped us gain some sensitivity for the difficulties some skiers and snowboarders might experience at our home areas.

Our responsibility as instructors is to be sensitive to the variety of challenges students might grapple with as a result of disabilities related to visual processing, visual-motor integration, and auditory discrimination. (And, frankly, students whose only challenge is that they don't speak or read English will benefit from having an instructor who recognizes how this may impact the lesson and takes steps to adjust his or her communication strategy.)

Everyone—not just people with a diagnosed disability—has learning strengths and weaknesses. If instructors are mindful of shaping lessons to maximize strengths and mitigate weaknesses, they can begin to creatively integrate a variety of approaches that appeal to the mix of individuals in their classes. Developing disability sensitivity awareness through various activities helps instructors "experience" the challenges skiers and riders may face in their quest to master snowsports; challenges, incidentally, that

are largely unrelated to technique or terrain.

Savvy instructors recognize that a wide range of abilities and deficits exist in our increasingly diverse snowsports population—diversity shaped by everything from non-English speaking guests to equipment advances and improved teaching methods that expand the opportunities for more people to enjoy snowsports.

Those with diagnosed disabilities, such as physical and vision impairments, *may* work with an area's adaptive

registration process. For these reasons—and more—it's a good idea for *all* instructors—not just those affiliated with adaptive programs—to increase their disability sensitivity.

VISUAL CHALLENGES

A common problem among young children—and some adults—is figure-ground confusion, which is the inability to pick out a figure or object in a complex background. Besides having difficulty with trail maps, these skiers and riders might not be able to identify their instructor, who likely is wearing the same style and color jacket as all of the other instructors. To gain some insight into this particular challenge, look at figure 1 on page 58 and see how many stars you can count in 20 seconds. (The answer is at the end of this article.)

Creativity is the key to developing strategies to deal with visual challenges

Our responsibility is to be sensitive to the variety of challenges students might grapple with as a result of disabilities related to visual processing.

program or come with support groups trained to aid them on the slopes. This is not always the case, however. In addition, skiers or riders who are developmentally challenged, autistic, emotionally impaired, or have a closed head injury may or may not be thus identified in the such as figure-ground confusion. Some instructors wear colorful or funky hats and others decorate their helmets. One ski school realized that clients were having difficulty understanding the concept of "skiing in and out of counter" because their instructors' jackets were the





same color as their ski pants. The school changed the uniform to one color for the jacket and another for the ski pants.

Of course, there are other tactics that can enhance visual comprehension. When teaching children how to do pole touches, it can be helpful to tie colored plumbing tape on the poles—one color on the right side and another color on the left. In teaching wedge turns, the tape can used to identify which ankle to pressure. The colored tape can also come in handy when pairing students up with a buddy for shared learning experiences. Simply identify each pair with a different color of tape tied to their wrists. This also helps students who tend to get separated and need a partner.

Young children and those with learning challenges might have visual-motor integration difficulties that diminish their ability to replicate the movements they see. For example, if the instructor demonstrates a maneuver while facing the class, some students might not be able to reverse the movements in order to perform them. To gain some appreciation for this inability, grab a pen and a mirror and place the mirror so that figure 2 is reflected in it. Then, looking only at the mirror, draw a line from "Enter" to "Exit" while trying to stay inside the black lines.

An obvious case of visual-motor integration dysfunction in skiing is when a student-upon attempting to imitate the instructor's wedge position makes a wedge with the tails of the skis together instead of the tips. To get the student to put the tips close together and separate the tails, you can use clips on the tips (such as Easy Wedge, available in the PSIA-AASI Accessories Catalog). Alternatively, you can make wedge tracks in the snow and have the student step in those tracks. Or, mark a dot on the tip of each ski with a colored marker and instruct the student to put the colored dots together.

Some resorts make a grid for the students to walk through in a wedge position. Snowboard instructors might want

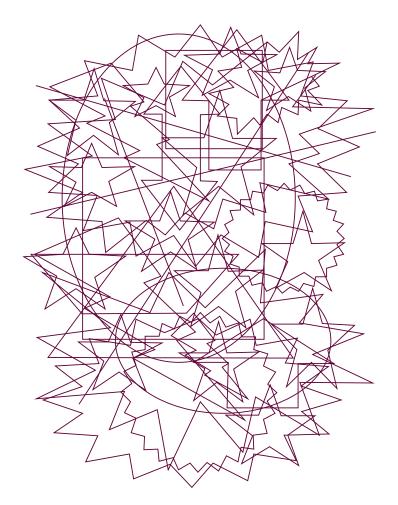


Figure 1: Visual Processing Exercise

to put colored stickers on the different edges of their board and the student's board to help riders differentiate toeside from heelside.

AUDITORY ISSUES

Visual and motor difficulties are more discernible than auditory deficits. These students may be deaf, hard of hearing, or have sound-processing difficulties. Those with sound-processing issues cannot separate the instructor's voice from the background noises on the hill (such as the resort PA system blaring music, lift or groomer noise, or the general on-hill activity).

To understand what these students go through, grab two friends and try this activity with the pictures in figure 3 on page 59. You'll want to heed the following instructions as your friends read them—at the same time, at the same volume, but with a two-picture delay between one friend and the other: "Circle the girl with her hands in the air. Draw

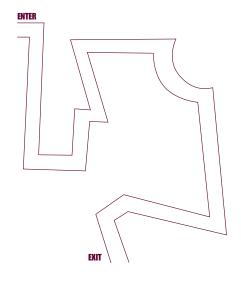


Figure 2: Visual-Motor Integration Dysfunction Exercise

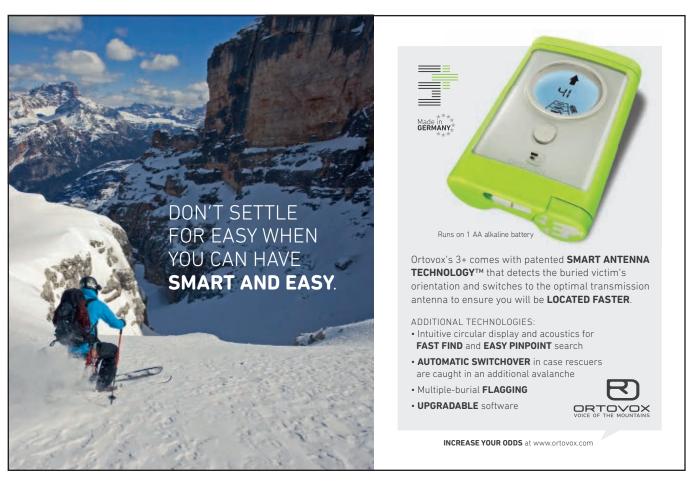
a line under the house. Write a name for the cat. Draw grass under the tree. Put two cheeks on the sun. Write the name of the instrument. Draw an outline around the dog's scarf. Put an X through the cactus. Write what the couple is doing. Circle the mouthpiece on the saxophone. Write the word "party" under the picture. Name the biggest city in your state."

A good place to try this exercise would be in the cafeteria at your resort during lunchtime. You'll find, as students with auditory disabilities no doubt encounter every day; that it's very hard to hear and heed verbal cues when various auditory inputs are vying for your attention at the same time.

In order to avoid communication breakdowns caused by attention and auditory deficits, always face your students as you speak. Deaf and hardof-hearing students may be lip readers and need to see your face. Also check for understanding to ensure the attentiondeficit student understands the directions. Pairing the hearing-impaired



Figure 3: Auditory Exercise



student with a helpful hearing student is also a good plan.

Word-association breakdown—another example of a potential auditory issue—is prevalent among people with hearing difficulties as well as with non-English speaking students. Simply put, these students do not relate objects with specific words. For example, I once taught a five-year-old girl who dissolved into tears when I suggested we ski the moguls. This girl was probably the most athletic child I have worked with in 30 years of teaching and I knew she had skied moguls before. I knew the issue was not inability to ski or fear.

Assuring her we would not ski the moguls if she didn't want to, I decided to take a run *next to* the moguls. When she saw them, she immediately wanted to go through the field. The problem, I discovered, was a breakdown in association of the *word* "mogul" with the object.

This child had a similar reaction to the word "race" the first time she heard it. She wanted no part of racing, but then asked me if the high school students, in line with numbers on them, were racing. I told her yes, and the next time she had a chance to race she garnered a bronze trophy against students three and four years older. It turned out this very athletic and talented five-year old was born in another country and simply was unfamiliar with the terms I was using.

MAKE IT HAPPEN

I hope the sensitivity-training activities outlined here will help snowsports professionals gain insight into challenges faced by skiers and riders with special needs or a language barrier. Tired of being labeled and singled out as disabled or different, these snowsports enthusiasts sometimes will not identify their issues in the registration process because they don't want to be distinctly classified. For many of these clients, skiing or snowboarding offers a chance to blend in with everyone else.

With our help as professionals, these students will not only be just like everyone else but maybe they will be so successful they will be singled out for surpassing everyone on the hill. Make it happen!

Oh, and as for the number of stars in figure 1, there are 14. Did you spot them all? 22°

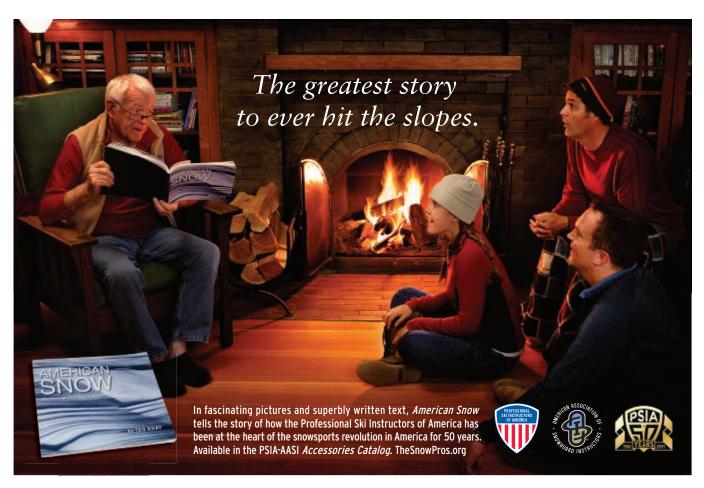
Mary Jane Doerr, a PSIA-certified Level II alpine instructor with a Children's Specialist 2 credential, teaches in Michigan for the Oakland County-based Blizzard Ski and Snowboard School and the Pine Knob Ski and Snowboard Resort. A special education teacher, she holds a master's degree in education from Wayne State University.

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A Thoughtful Complement to **Movement Analysis**

By JENNIFER SIMPSON

o excel as a professional ski or snowboard instructor, you must master the art and science of observing the details in a student's performance and accurately interpreting those movements, a skill known as movement analysis.

As instructors, we spend countless hours training our eyes and brains to do just that, learning to see the minutest of movements and correlate them to how skis and snowboards react.

Teaching models often emphasize that you should determine the student's goal and then use it to shape the lesson plan, which challenges you to determine the student's true goal and then relate that goal to the movements you see. This process of identifying and understanding the internal goals and desires of your students can be described as thought analysis. When combined with movement analysis, thought analysis creates a comprehensive understanding of what the athlete is trying to do, how they are attempting to achieve their goal, and why they believe their approach will work.

To successfully perform thought analysis, answer the three questions that follow:

♦ What is the student's specific goal? Defined as what the athlete is trying to accomplish, the goal generally begins as a broad-based statement, such as "ski or ride through expertlevel bumps." Challenge the student to refine the goal to a more narrow focus, such as a specific movement or line tactic. Simplifying what the student is trying to accomplish may help explain what's driving his or her movements, helping you create a relevant and meaningful learning experience for your student. For example, after talking more with your bump-skiing student, you learn that when she skis steep, challenging bumps she loses control of her speed and needs to stop and regroup earlier than she would like to.



- ♦ How is the student trying to reach the goal? Ask questions to discover how the athlete is trying to use a specific movement or tactic to reach his or her goal. Have the student describe and demonstrate movement. Understanding how the athlete believes that specific tactics or movements relate to the goal may provide telling insight to what you observed during movement analysis. Consider again the same bump skier. Through additional questions and demonstrations you learn that she is trying to slow down as she impacts each bump. She has been using Z-shaped turns and is trying to make a quick "speed check" at the end of each turn.
- ♦ Why is the student doing what he or she is doing? Encourage the



verri Harkin

student to describe why they believe that a movement or tactic will help them reach their goal. Exploring the student's reasoning may enable you to discover biases, misinterpretations, or misunderstandings that affect the way the student skis or rides. For example, after exploring why the bump skier thinks her movements will help her achieve greater speed control, you learn that she was taught this strategy years ago in a bump lesson. This technique has enabled her to ski through less steep bumps. When she is successful she likes the "check" because it reminds her of a hockey stop, which she equates with control. She notes that she sometimes has difficulty starting her next turn and has to traverse a few moguls instead of continuing on her intended line.

PUTTING IT ALL TOGETHER

By gathering information through thought analysis and combining it with the movement analysis you are already doing, you may be able to identify an aspect of the student's goal, intention, or understanding that can be easily modified to improve his or her overall performance. Once the student understands and believes the new option is valid, learning can continue. Sometimes, an adjustment to one or more elements identified during thought analysis may affect the movements and ski or snowboard performance to a degree that the initial movement assessment is no longer relevant. The student will experience movement change via an understanding breakthrough.

Consider again the same mogul skier and her movement and tactical intentions for speed control in steep bumps. You might partner with this student to develop a new understanding of pressure control and turn shape tactics that provide alternate speed control options. Perhaps this student will choose to use flexing and extending movements that enable the skis to maintain snow contact and follow a round turn path.

During your next lesson, instead of relying predominantly on *movement*

analysis, try to incorporate thought analysis to revolutionize your own effectiveness as an instructor. As you add thought analysis into your lesson, keep in mind that skiing is a moving sport. Your students typically like to be sliding and moving, versus watching others lap past them. Try to slip your thought analysis sessions into rest times and lift rides to make the most of your client's time. When you explain to your student why you are digging deep into their understanding they are more likely to engage in this exercise with you.

Just as a slight change in movement can have a dramatic effect on your student's performance, a slight shift in your teaching approach can bring equally big results in your lesson success. 22°

Jennifer Simpson is an instructor at Colorado's Vail Ski and Snowboard School and an examiner for PSIA-AASI's Central Division. She was recently named to her second term on the PSIA Alpine Team. She wishes to thank Roger Kane of Central Division for inspiring this article.





Get Glutes in Gear to Show Your Skis Who's Boss

By ROBIN BARNES

hether you're on a groomed trail, a park feature, or an off-piste run, your goal might be to ski in a strong, athletic, and efficient manner. Or maybe above all else you strive for elegance. Whatever your aim, stability gained from the proper biomechanical alignment of your hips and

knees contributes to solid performance and a crisp silhouette on the mountain.

Strong hip and butt muscles allow skiers to stabilize their hips and legs, which contributes to good alignment of the knees. And *that* makes for better technique when releasing and engaging the edges, altering edge angles, and managing pressure. The bottom line? Glute strength contributing to good knee alignment allows you to more effectively direct your skis where you want them to go.

ALIGNMENT ALLIES

So, what exactly is "good" knee alignment? It's when your knees are tracking over the center of your foot in a relatively neutral position until you use a deliberate muscular movement to roll the foot and knee inward or outward to change the edge angle of the ski on the snow (photo 1).

Conversely "bad" or ineffective knee alignment is when your knees are aligned to either side of the center of your foot. This article will address muscular issues that may cause the knees to align toward the inside of your hips and ankles (photo 2). This is often due to weak glute muscles, causing the femurs to rotate internally,

toward the midline, and the knees to fall inward. This knock-kneed appearance is commonly known as a "valgus alignment."

The soft tissues of our bodies (muscles, tendons, ligaments, etc.) help maintain proper alignment of our bones during movement (i.e., muscles hold the bones in place). When bones are misaligned and moved through a range of motion, there will be friction,

instability, and lack of mobility—which will lead to poor performance and possibly even injury. Put another way, because muscles support bones, they can either help hold the bones in a good position, or allow them to lean into a bad one.

SUPPORT GROUP

To get a better idea of how muscles support bones to create a particular alignment, imagine a person standing with poor posture—with the shoulders slumped forward and the back rounded. With greater strength and awareness of the upper back and rear shoulder muscles, the person can stand in a way that the muscles "hold" the bones of the upper back and shoulders in



ant Nakamura



Photo 2

place, resulting in a straighter look and better posture.

Similarly, when gluteus muscles are weak, they don't hold the femurs in good alignment, or in a relatively vertical position. If the muscles that wrap around the hips are not developed and strong, the femurs can fall inward the same way that the shoulders of a person with poor posture fall forward.

No wonder these characteristics can wreak havoc on ski technique! This valgus stance complicates the ability to increase, decrease, or entirely eliminate edge angle of the skis relative to the snow.

You may be thinking, "What about bootfitting? Doesn't that process help correct stance issues?" Absolutely. But boot alignment and strength training are partners when it comes to alignment. Bootfitters do wonders to align our stance on skis, but bootfitting should supplement muscle development. How

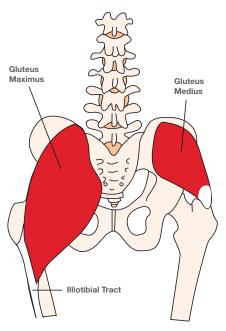


Figure 1: Gluteus Maximus

we move on our skis always trumps how we stand on them, and "addressing one without the other could have a net gain of zero," according to Greg Hoffmann of Ski Boot Fitting in Vail, Colorado.

"As a person is going through a strength-training program to potentially affect alignment, the ski boot alignment can change, and the need for lateral canting can diminish or even disappear." Hoffmann said. "We see this a lot, and I can speak from experience that the concept is valid."

GET INTO GLUTE GEAR

Here are five exercises that should be part of any skier's strength development and muscle activation training. These exercises will both develop strength and awareness of the hip/butt/gluteus muscles—including predominantly the gluteus medius (fig.1)—and train you to activate these muscles. Effectively, they'll teach your muscles to support your bones in the best possible alignment for ripping some great turns. Don't feel, however, like you need to do all five exercises every day. Rather, pick a few and incorporate them into your existing program. Note: Before doing any of these strength-training exercises get consent from your doctor and make sure you allow 5 to 10 minutes to warm up. And for maximum benefit, consider adding a hip flexibility program as well (see "Stretch Your Performance Through Hip Flexibility," Winter 2011.)

Hip Hikes

This exercise is great not only for strengthening the gluteus medius but also for teaching you where the muscle is and how to contract it. It takes a little coordination to get it right, so take your time and focus on the task.

Stand on a bench or step with your right foot close to and parallel with the edge of the bench. Keep your right leg straight and let your left foot dangle off the side. Your left hip will be slightly below your right hip and your right glute will be relaxed (photo 3, page 66).

Contract your hip muscles on the right side (right gluteus medius) by tightening the muscles (where my hand is on my hip in photo 4, page 66). Contracting the glute will cause the left hip to raise somewhat, but keep the energy and focus on the right side and not on squeezing the left oblique muscle to lift the left hip. You should feel this at the outside of the right hip (glutes) after several repetitions. Keep your hand on the outside of your hip (as in the photo) so that you can feel the muscle tighten.

Once you're proficient at activating the gluteus medius muscle to raise and lower the hip, do these movements on each side for 20 to 30+ repetitions or until you feel solid fatigue in the glute. If necessary, use a ski pole to steady yourself or do the exercise next to a wall so you can reach out to aid balance.

Band Walks

These are probably my favorite exercises for promoting good stability of the hips and legs and strengthening the glutes in preparation for skiing. You can purchase the necessary exercise bands for a few dollars at many online fitness stores. Don't feel as if you have to get a super-heavy band with heaps of resistance. It's imperative to use good form and solid mechanics, not brawn.

The following band walks take some time to get right. Be patient but persistent.



Photo 3



Photo 5



Photo 4



Photo 6

Forward/Backward Walks

As shown in photo 5, put the band around your ankles (or just above your knees if you're just starting out, recovering from injury, or generally weak). Flex your ankles, knees, hips, and spine to get into a partial squat position. Stretch the band by opening your legs and feet (photo 6), and keep your knees tracking directly above your toes versus spreading the feet out wider and shifting the knees into a valgus (knockkneed) position.

Walk forward, taking small steps, but keeping the feet and knees open and aligned. Focus on trying to stretch the band laterally rather than on taking big steps forward. Keep your torso stable but feel free to swing your arms as you would while walking naturally. Keep the feet pointing forward (parallel) the entire time—don't let your toes point outward to the 2 and 10 o'clock positions (photo 7). When the toes point outward, other more developed muscles take over and the glutes don't do their job. Be disciplined and watch your feet until you get used to this movement.

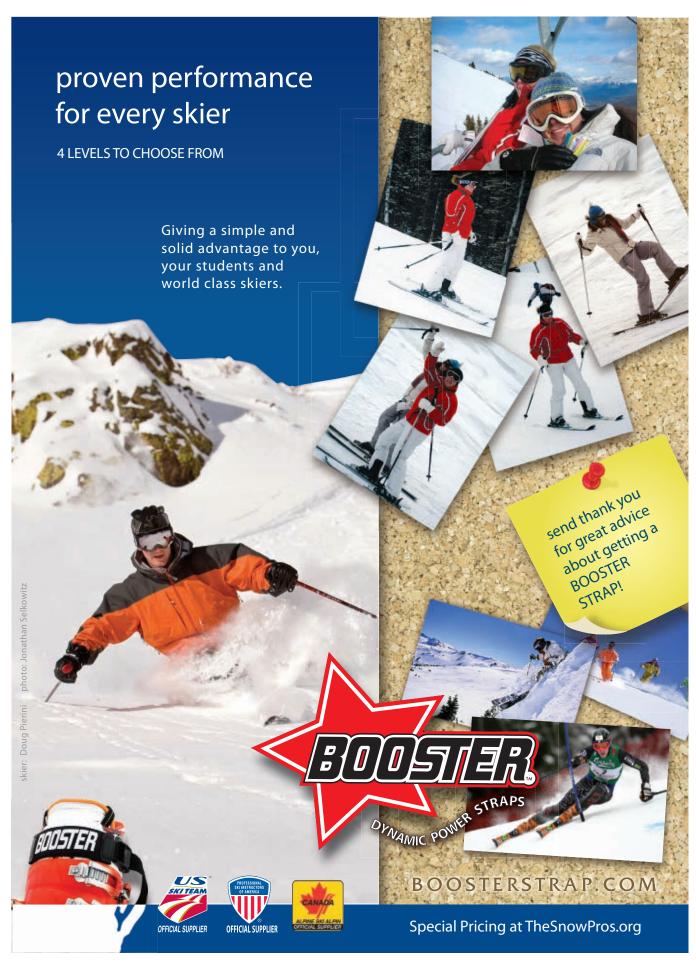
Take 20 to 30 steps forward; then, keeping the same alignment, walk backward 20 to 30 steps.

Lateral Walks

Keep the band stretched and step your right foot out to the side, making sure you lead the step with the outside of your leg, not just your foot (photo 8, page 68). In other words, don't try to take a step with your knee way inside of your foot (which would force you to step onto an edged versus a flat foot). You want to step by firing up the hip muscles (glutes) and stepping laterally with the outside of your leg to keep your knees tracking over your feet the entire time.



Photo 7







Once you've stepped the right foot out, bring the left foot back closer to the right foot, to a hips-width stance. Be sure to bring the left foot back in a controlled, steady manner so the band doesn't snap the foot back toward the right foot.

Also, be sure to keep both feet parallel the entire time. As fatigue sets in, or if the glutes are particularly unaccustomed to firing this way, the foot that you step out with may have a tendency to turn out, toward 2 or 10 o'clock (refer again to photo 7). This is your body's attempt to use quadriceps and hip flexor muscles to compensate for the weaker glutes. Keep the size of the steps and the resistance at such a level that you can keep your feet parallel at all times.

The movement should happen entirely with the lower body. As you step the right foot out, keep the shoulders aligned over the hips and don't lean your shoulders to the left to move the foot to the right (photo 9). Take 12 to 15 steps and then switch sides, leading with the other foot.

BOSU Squats with a Band

This exercise continues to target muscles of the hips (glutes) but will also add a slight balance challenge. For this exercise you may be able to use a stronger resistance band than the one for the band walks. Put the band just above your knees and find your way up onto the flat black side of a BOSU® (available in fitness stores and online). I say "find your way" because you may be comfortable jumping up onto the BOSU or stepping onto it by placing one foot on one side, letting the BOSU tip like a skateboard, and then stepping up with the other foot. You may want to use a spotter for safety.

Stand on the ball with your feet just inside of the handles, keeping your feet parallel so that your toes aren't pointed outward. Bring your hips back and then bend your knees to squat down, making sure to keep your knees laterally aligned



Photo 9

over your feet (photo 10a, page 70). Stand back up and press your knees outward to resist the band pulling your knees inward (photo 10b, page 70). Repeat for 20 reps, working up to three sets.

Note: For a less challenging version of this exercise you can do these squats on the floor instead of using the BOSU.

Drop-and-Catch Squats—Double and Single Leg

The following types squats help reinforce the knee alignment that aids balance when making recovery moves.

Double Leg:

Stand in front of a mirror with your feet shoulder-width apart, feet parallel,



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and knees just barely flexed. Quickly pick your feet up about an inch off the floor as you drop into a squat. (This is a down-unweighted movement.) Try to keep your center of mass from going up before you drop. As you land (catch), sit back into your hips, activating your glutes so your knees don't move forward in front of your toes.

As with the proper alignment shown in photo 1, keep your knees aligned over the center of each foot, with your feet parallel (that is, don't let your toes point outward). Look in the mirror to make sure your shins are close to vertical.

Hold this position for 3 seconds before standing up and doing another repetition to emphasize the deceleration and stabilization phase. Do 10 repetitions, working up to 3 sets.

Single Leg:

Begin in the same position as the Double Leg Drop-and-Catch. Quickly pick your feet up as you drop into a squat, but this time "catch" yourself on one leg (photo 11). Again, your center of mass should not go up before you drop. Focus on maintaining proper alignment; it will be more challenging to do so this time. You'll be acutely aware of whether your tendency is to activate your glutes and maintain good knee alignment-because if you're deficient in one of those areas your knee will move excessively inward and/or forward. Check your image in the mirror to make sure your shin is mostly vertical and your hips are behind your foot.

Hold this position for 3 seconds before standing up and doing another repetition. Remember to reset and begin each repetition with your weight balanced evenly between your feet. Do 10 repetitions per leg, working up to 3 sets.

Lunges with Exercise Tubing

These lunges are another single-leg exercise to develop strength and create awareness of how your ankles, knees, and hips align. Anchor the exercise



Photo 10a

tubing (available from fitness stores) to a pole on the left, with the tubing just above your right knee.

Step to the right far enough for the resistance to pull your right knee to the left. Step back with your left leg so you can flex down into a lunge position (photo 12a), making sure your right knee doesn't go forward of your toes on the right foot. Also, when you step back, make sure your feet are hips-width apart rather than aligned in a straight line (i.e., you shouldn't look like you're standing on a balance beam).

The goal with this exercise is to lunge up and down while keeping your right ankle, knee, and hip aligned in a straight line (photos 12a and 12b). You'll need to fire up your glutes to resist the band pulling your knee inside and to the left (photo 13).



Photo 10b



Photo 11

Photos by S







Photo 13

Repeat the lunge for 15 to 20 reps before changing sides. Work up to 3 sets per leg.

REAL RESULTS

All of these exercises are a great addition to a workout regimen or your warm-up routine before skiing. They help you get blood flowing and heat into the muscles, and mentally prepare you for how you want your body to move and feel. In addition, they're good standalone exercises to program your muscles for effective and functional movements.

Remember, practice makes *permanent*. The more often you do them, being mindful of good form, the more you'll reap the benefits and find yourself skiing stronger and more effectively. And we all know that translates into more fun! **52**°

Robin Barnes, who this season begins her second term on the PSIA Alpine Team, is the ski school director in Portillo, Chile, a certified personal trainer, and a ski teacher/trainer at California's Heavenly Mountain Resort.





Body Language: Are You Reading It?

By ROSS MATLOCK

've often heard statistics stating that more than 90 percent of all communication is nonverbal. Reading body language is not an exact science, but it's something we do every day when communicating with the people around us.

For example, we can often observe quickly if someone is cold by the person's overall body position.

One way to better understand how to read body language—regardless of whether you're a nordic, alpine, or snowboard instructor—involves breaking down the segments of the body and focusing on them, but that's not always easy to do in winter when most of our body parts are covered in outerwear.

Take the eyes, for example. When someone's eyes look left and right, up or down, roll back, or widen, they give us clues as to what that person is thinking. However, more often than not the eyes of a student are covered or hidden behind goggles or sunglasseses, preventing us from noting observable differences. Fortunately, there is one telling body part that offers us insight into people's thoughts and feelings without verbal communication—and that's the head.

USE YOUR HEAD... AND THEIRS

The head plays a critical role in communicating body language. Even when covered by a hat or helmet, the head tends to be an indicator for the whole body. Because the neck is so flexible, the head can adopt many subtle positions that are readily observable. In this tip, I address three main head movements instructors should focus on when working with staff or students.





The Fast Nod

The first observable head movement consists of fast head nodding. We seem to understand that a slowly nodding head is associated with attentive listening. Fast head nodding, on the other hand, can often be interpreted as a signal of impatience, akin to someone urging you to "hurry up." Often accompanied by hand gestures, the fast head nod is a sign that perhaps you need to wind it up and move on.

The Side Tilt

In general, a head that's tilted to one side represents a nonthreatening, submissive gesture that signals a moment of thoughtfulness. It is also sometimes associated with the notion of trust, indicating that someone is "sizing up" what you just said or the situation at hand. When you see heads tilted to the side, you may want to give these folks a little more time to process the information you just shared.

The Downward Tilt

A head that's tilted down is often a sign of criticism or disappointment.

When teaching, this can be one of the easier head movements to observe—and may indicate a level of distrust

on track and prevent slight misunderstandings from becoming real issues. A final word of caution: If body language

Good instructors have the ability to read body language and make adjustments on the fly to keep lessons on track...

or disapproval. If you see this during a lesson or clinic situation, you may want to take a different approach or try something new.

HEAD'S UP!

As I noted previously, reading body language is not an exact science. But if statistics hold true, we need to pay close attention to the nonverbal cues our students or fellow instructors give us.

Good instructors have the ability to read body language and make adjustments on the fly to keep lessons indicates how other people feel toward you, keep in mind that your body language does the same, communicating how you feel toward others. Lift that chin and tilt your head to the side! 22°

Ross Matlock lives in Crested Butte, Colorado, and was recently named to his third term on the PSIA Nordic Team. He teaches at the nordic center at Crested Butte Mountain Resort and conducts avalanche courses for Crested Butte Mountain Guides. Ross and his wife Jill also run a small business taking people skiing around the world.

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Nordic Skiing Model Has Grown More Multi-dimensional

By J. SCOTT MCGEE

ike different branches of the same evolutionary tree, models that describe ski and snowboard movements have grown not only to include different skills, but also different types of abilities.

PSIA Nordic Team member David Lawrence puts body position, timing, and power to effective use.

While body position, timing, and power aren't exactly skills, they have been called "movement competencies"—which sounds a lot like something that physical education programs might lose their state funding over. In crosscountry skiing, there is some discussion afoot about the most accurate name for these essential aspects of the sport. PSIA's Nordic Skiing Model describes a progression—a way of looking at skiing and a recipe for change.

Although the movements of different disciplines can be described in terms of the same skills alpine skiers apply, nordic skiers, coaches, and athletes turn to a nordic-specific, foundational approach for the kind of skiing where you generate your own momentum rather than let gravity do it for you. Tailoring the model to cross-country skiing works for a number of reasons:

- ◆ It brings focus to key ideas in a logical order;
- ◆ It is simple and easy to remember; and
- ◆ It works for coaching, self-coaching, movement analysis, designing lessons, and making training plans.

Let's take a look back to understand where we've been—from, first, a Skills Concept of alpine origin to, second, a six-part model elucidated in the *Nordic Technical Manual* to, third, today's Nordic Skiing Model. The changes over time were propelled by a gradual-but-constant redefining of what matters most in skiing. It is not skills but, rather, types of movements—perhaps even qualities of movement types—that matter. The importance of speaking the same language as the U.S. Ski and Snowboard Association (USSA) heavily influenced the move to the current model, which was adopted by the PSIA Nordic Team and participants of the 2006 Examiners' College. To understand the models better, lets look at how they evolved.

SKILLS MODEL FOR NORDIC

Prior to the publication of the *Nordic Technical Manual* in 2005, the Nordic Skiing Model was based on same model used for alpine skiers (fig. 1).

This model was convenient in that it could be used to describe both uphill

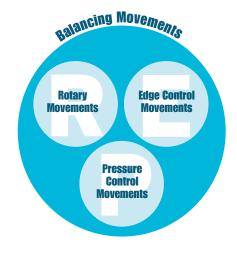


Figure 1: Skills Concept

and downhill travel, and it was already familiar to much of the membership. Many new converts to cross-country skiing were first exposed to skiing in the alpine (downhill) context, and this gave them ready access to a model for skiing and movement analysis. The problem was that it was "too alpine" for dyedin-the-wool—or Lycra® as the case may be—nordic skiers, and it left out some very key aspects of nordic skiing.

NORDIC TECHNICAL MANUAL

When writing the nordic manual in 2005, the authors brought six skills to light in new model: ski-to-ski balance, flexion/extension, poling, relaxation, rhythm, and edge control (fig. 2).

The addition of relaxation, rhythm, and poling were out-of-the-box and really opened our minds to different ways of looking at technique. Ski-to-ski balance made the cut because "balance" sounds static, while nordic skiing—and alpine skiing and snowboarding for that matter—are anything but static. Effective skiing relies not only

on moving out in front of the balance zone, but recovering from imbalance in any direction. Conveying dynamic movement within the confines of being "in balance" seemed critical.

Relaxation, often overlooked, is a skill so essential for efficiency that we felt the need to include the component of rest in an updated model. Rhythm has long been addressed as a quality of movement (see the content on duration, intensity, rate, and timing <code>[D.I.R.T.]</code> in the *Alpine Technical Manual*, pages 8 and 21), but in both classic and skate skiing,



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establishing and changing rhythm are critical to energy management. Further, dynamic movements are optimized in the context of rhythm, so it truly is an essential skill.

While poling was conceivably covered by flexion/extension, this muddied the waters between upper and lower body movements, which might be flexing and extending in opposition in some techniques, and so we identified poling as its own skill, to be developed from beginner to expert levels.

GRASPING FOR A NEW MODEL

For a brief period going into the 2006 Cross Country Examiners' College in West Yellowstone, Montana, the PSIA Nordic Team began to consider a phase-model for cross-country skiing skills. Compression, push-off, and glide seemed a logical trio of movements, and good focal areas to optimize. This phase model—like phases of a turn in alpine, snowboard, and tele—still works in concert with any of the skills-type models described here.

At the 2006 Examiners' College, examiners and trainers from PSIA's divisions met with the cross-country coaches from USSA. Their contributions to the discussion and sharing of their recently adopted model led us to believe it was time to adopt the three-tiered USSA model—which emphasized body position, rhythm/timing, and powerto become congruent with the top coaching in the United States. This was a landmark decision. PSIA Nordic Team members and team alumni, in addition to divisional representatives, were present, and the decision to march in step with USSA was made without argument or strife—although there was considerable discussion.

In the intervening years, our instincts and considerations have been corroborated by USSA's continuing embrace of the model, especially among coaches and competitive athletes. As shown in figure 3, USSA has recently added a new twist to its foundational

POWER

RHYTHM AND TIMING

FUNDAMENTAL MOVEMENT

FUNDAMENTAL ATHLETIC BODY POSITION

- 1. Develop fundamental athletic body position (position)
- **2.** Develop the fundamental movements of the sport (movement or motion)
- **3.** Develop rhythm and synchronization of the fundamentals of the sport (timing)
- **4.** Develop power through the increase of force applied and/or the increase in speed of movement (power).

Figure 3: Foundations of Cross-Country Skiing

model by adding a "fundamental movement" layer between body position and rhythm/timing. Participants in PSIA-AASI's recent 2012 Fall Conference on standards—held last month in Copper Mountain, Colorado—discussed including this four-tiered approach to cross-country instruction in the association's upcoming editions of standards and manuals.

In the current parlance, foundational refers to the fact that the fundamental athletic body position is the starting point. In both teaching and coaching, movement analysis starts with body position, which makes sense because it forms the foundation of determining whether the movements that follow are efficient. Body position—as a way to create forward movement—is at the core of teaching methodology for

beginners up to expert skiers. Indeed, some of the same drills that are practiced by USSA athletes are also taught in beginner lessons. For example, the U.S. Ski Team's cross-country athletes as well as beginners go through a "falling forward" drill, in which the skier stands on both feet, flexing the ankles to begin a forward fall, and then steps onto the opposite foot. Shortening the step and shuffling keeps the skier in a forward position.

Once the foundation of body position is laid, USSA next considers fundamental movements, which might include actions like compression (ankle and abdominal flexion, and weighting the poles), pushoff, and transferring weight from one ski to the other. *Coordinating* these movements falls under the category of "rhythm and timing." If you master timing of movements but the body is

USSA Level 100 Cross Country Coaches Manual

in an inefficient or ineffective position, or the movements are inaccurate, you are wasting energy. For many newbies, the mistaken conclusion is that cross-country skiing is too much work.

Finally, power must be applied from a good body position through directed movements, and with proper timing in order to be effective. Pushing off when there is no grip or when the leg is already extended are two examples of how cross-country skiers waste energy.

A model based on body position, fundamental movements, rhythm/ timing, and power—foundational in nature—provides a clear starting point in teaching, movement analysis, and prescription at both the most basic and most advanced levels. Its simplicity belies all the complexity of the variety of skill applications that can fit into this four-tiered pyramid. Whether it's the first kick and glide, skating to the lift on alpine or tele skis, or modifying tempo to increase power in a World Cup sprint race, movements can be observed and prescribed based on this model.

bottom of the homepage.

PUTTING IT INTO PRACTICE

To use the model, look at any skier and compare the body position to an idealized optimum position. If the body position is inefficient or ineffective, in first-aid terms it's a "stop-and-fix" situation. After helping the student refine body positioning, improvements in fundamental movements and then in timing will bear more fruit.

So it is with timing and power. More power, mistimed or poorly aligned, is wasted energy. Honing body position, movements, and timing before addressing power will make applying power more effective and efficient. More than an order in which to look at aspects of skiing, think of the model

as underscoring a priority in which to focus on skiing skills.

You may even find that a model for nordic can shed light on riding in the discipline you're most at home with.

J. Scott McGee coaches the PSIA Nordic Team and works as the Sports School Director for Wyoming's Snow King Mountain. A former telemark competitor, he now dreams of perfect corn on spring backcountry skate ski tours. McGeee spends his summers guiding climbs in the Tetons for Exum Mountain Guides. His new book, Falcon Guides' Basic Illustrated Cross Country Skiing offers guidance to novices and experts on equipment, technique, and all aspects of the sport.

GLIDE ON OVER TO THE MOVEMENT MATRIX

For more visual exposure of the skills outlined above, check out the cross-country component of PSIA-AASI's *Movement Matrix*, which has recently undergone some extensive updating. PSIA-AASI members get free access through the Publications, Video, & Resources page at TheSnowPros.org



Information that stays with you

The Movement Matrix is the premier online video source for PSIA-AASI members to perfect alpine, snowboard, nordic, and adaptive instruction methods. Featuring live-action learning modules for skills concepts, situational skiing and riding, drills, and certification standards, it's the perfect complement to your manuals. For an annual subscription fee of \$14.95, you'll have access to a fully customizable tool to help you filter thousands of selections and find real-life explanations. **To subscribe, log in to TheSnowPros.org and click on the Movement Matrix link at the**

The Movement Matrix is now FREE to all members through the generosity of a grant to the PSIA-AASI Education Foundation.

Instructors Teach, Funcasters Create Experiences

By ERIC ROLLS

s snowboard instructors, we're tasked with not just teaching people how to ride, but with giving our clients an *experience*. Becoming a great educator takes years of practice and lots of learning.



The people in this photo—Matt and Caelen Soltis—are real, repeat clients of the author; they are not paid actors pretending they have been "funcasted."



Some instructors are naturally gifted with oversized personalities that bring clients back vacation after vacation. Others may be less flashy, but are still great teachers who offer excellent lessons. To inspire your students to come back for more, follow me into "funcaster" territory.

Instructors who predict what is going to be fun for their clients, funcasters get to know their clients well enough to give them experiences that are truly memorable. A great way to get started is to engage your students in casual conversation about what other sports or hobbies they enjoy. Listen to what they like to do, and then start thinking about how those activities can transfer to your lesson. By trying to understand what they like about certain sports or activities, you can often find nuggets of information that will also apply to their snowboarding motivations.

Let's use a challenging example like bowling. I don't bowl much but you can imagine the general premise. It involves a set of movements and positioning of the body to get the ball to take a course at a directed target. If the thrill for bowlers is that anticipation of when the ball leaves their hand to when it hits the pin(s), that emotion is a potential motivator. In the context of a snowboard lesson, this sounds like sliding their first flat box is in order!

Directly related to bowling, I would ask them about their setup on approach,

the movements for the "maneuver," and relate it all to sliding the box. Of course in this case, they are the ball . . . but the good news is that the movements or lack thereof is simpler than the way they set up to bowl a strike. I bet they look more graceful on their first box than I am when I bowl.

Speaking of grace, if you have the opportunity to teach someone who is into yoga, a great approach is to show them the Zen of riding with the mountain and not resisting it. Making smooth, rounded, speed-control turns with carving in between can be a quiet, peaceful experience. Movements that involve flowing from one muscle group to other connecting muscle groups provide a sensation that many yoga enthusiasts strive for.

Other cues you can pick up during initial conversations with students include details about their goals and why they're taking the lesson in the first place. To create a memorable experience, try not to limit your lesson plan to just "skills" even if improving their riding is

the only goal they've described. Many students have underlying goals that are just as important to accomplish as the skill-oriented ones.

For example, I once taught a client who said he wanted to learn how to cruise around comfortably on intermediate terrain. After meeting him, I learned through conversation that he used to play on a competitive hockey team. Because he's 48 years old and has injured his knee twice, he no longer plays competitively but he still enjoys ice skating with his daughters and plays a pickup game once in a while to enjoy the "rush" of the game.

I could have easily had him skidding around on intermediate terrain all day, but I thought that he might like carving for its similarities to skating on one blade of an ice skate. He was stoked, and he came back for more. So the next day, I took him to the halfpipe—and when we pulled up he looked at me as if I were crazy. But we had a blast carving across the flat bottom and riding up the walls; he even bagged a few spins on the

wall. By using what I learned in initial chats with him, I was able to put that information to use to show him some fun things to do on his board.

Another bonus of funcasting is that it complements the methods of "teaching for transfer." Rather than just transferring skills from another sport to snowboarding, you're integrating each individual's inspiration and motivation into the lesson experience. Everyone is different, and has different experiences that make up their life story. When you dig a little to discover what they enjoy about their favorite sports and activities, you give yourself an edge, moving from being a skilled instructor to forecasting their fun. This will give them a memorable experience and a great reason to come back for more. So don't be a funcrusher; be a funcaster! 32°

Eric Rolls is the ski and snowboard school training manager for Canyons Resort in Park City, Utah. He was recently named to a second term on the AASI Snowboard Team.



The Snowboard Family: How to Embrace Evolution and Grow the Sport

By SCOTT ANFANG

ver think back to that first time you went snowboarding? What motivated you to get out there and do it? Better yet, what motivated you to keep at it? ¶ I know there are tons of great stories out there. (In fact, why not chime in on the "Snowboard Motivations" discussion on the PSIA-AASI Community?



The learning area at Smugglers' Notch includes child-size terrain features and a treehouse-themed play area.

Get there by logging in at TheSnowPros. org and clicking on the PSIA-AASI Community link at the bottom of the page.) Here are some generalized observations I have made about first-time snowboarders, gathered over the years from my experience as an instructor.

Back in the early stages of snow-boarding and snowboard lessons—I'm talking about 15 to 18 years ago—it was definitely a male-dominated group, particularly young males between the ages of 12 and 21 who were focused on having fun. Of course, where there are teenage boys having fun, the next logical group to follow would be the teen-age girls; it only makes sense, right? Pretty soon, fathers were thinking "Well, if daddy's little girl is out there snowboarding, I'd better see what's really going on with these boys and girls having so much fun together. . . and, besides, snowboarding can't be that hard."

The dads joined in for very different motivations and turned snowboarding into a family discussion, which meant that mom wanted to give it a try. The difference is that mom would often start by taking a lesson first, while dad might have started out by trying to do it himself. After one too many falls, he is either back on skis or has decided to get a lesson if he's motivated to stick with it. And there you have it; an early version of a snowboarding family.

From my perspective, this has been the evolution of the snowboard-lesson population for the past 20 years. But



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A snowsports industry initiative in partnership with this publication.



Kids need kid-size equipment.

guess what? Those 12- to 21-year-old males who started this thing are having families of their own. The missing piece of the puzzle is being placed. We now a new evolutionary track for the snowboard family! The dad who started off as a snowboarder does not have the same instinct to go back to skis. I believe this will have an effect on the resort and snowboard industry. Today, even though it is somewhat uncommon to come across a total snowboard family, in the near future I feel this will not be so uncommon. And there are a number of ways I think we can take advantage of this opportunity.

ONE SIZE DOES NOT FIT ALL

With a broader range of snowboarders out there, perhaps the industry needs to focus on offering more options for more riders. The equipment needs to not only



When mom and dad both ride, the foundation of the snowboard family is set.

be different for different riding styles, but also for various size ranges.

All riders do better with snowboards that match their weight ranges, and female riders will progress more quickly on narrower-waist widths for faster edge-to-edge transfers. Kids, of course, need short boards. Simpler binding buckles and strap configurations will also help keep it easy for the little guys.

Let's talk about boots for a minute. We all know the importance of a well-fitting boot, which is why I can't believe how many female clients I ride with are in boots that are too big for them. Sometimes it's because that size is all the rental shop had, or that no store in town had a boot small or narrow enough in the heel pocket. Likewise, I think there are also very few companies making true performance snowboard boots in children's sizes.

That said, using hand-me-downs from a friend or older brother or scoring a great deal at the thrift store might not be the best option for long-term performance and personal development in riding. But if it's the only way some people are going to get up there playing on the mountain, I can't really slam their decision. At least it's a start.

A BETTER BEGINNER HILL

Skiing and snowboarding take place at the same resort. Well, most resorts that is. Skiers and snowboarders stand in the same lift lines, eat at the same cafeterias, and play with and on the same terrain—yet they are still different sports and should never be treated as the same.

I feel this is true from day one. It's not that we can't all get along, but we *are* playing different sports or games, which is why I ask this question: What should a beginner snowboard area look like?

Sure a newbie rider can learn on a groomed green run just like the skiers have always done, but snowboarding is different so why should the beginner areas be the same? Do you think there is a logical reason that snowboarders sometimes seem out of control in the beginner areas? If it's the beginner hill, it's not that they are over-terrained. It might just be that the right terrain is not available.

One of the most challenging aspects of teaching a very young person a first-time snowboard lesson is actually just moving them around. An adult snowboarder takes the back foot out and learns a skating maneuver, but this is very difficult and energy consuming for a small child. Because of this, little



kids need more individual attention in order to eliminate the constant strap-in, strap-out approach. That's why I think the beginner area should look more like a playground, and not a big open field like a typical beginner hill.

In this flattish playground area, there should be small terrain features where children can gain some independence and glide down by themselves with no threat of getting out of control and not being able to safely stop. On a regular playground, you have play stations, swings, slides, monkey bars etc. Ideally we should follow that same theme and create play stations with a purpose in our beginner snowboard areas, with places where instructors can work on promoting balance, edging, and rotation, and simply getting students mileage while they are having fun.

The beginner snowboard area should look and feel to the student like a playground, while to the instructor it can be a series of fun skill-building stations. After students feel confident in these skills, then we can move onto a moving carpet or take a lift to what we all traditionally know as the bunny hill.

RE-FOCUSING ON FUN

Another issue that I see being addressed is how snowboard lessons and programs are being run. Again, back in the day it was pretty much a one-size-fits-all snowboard program: "Level 1–6 skiers over here, kids over there, adults over here . . . and all you snowboarders meet across the way."

This has certainly changed over the years. We all know adults learn different than kids no matter what they are trying to learn. We also all know there are many different learning styles amongst both adults and kids. Simply by dividing the adults from the children you can take a very tactical approach with your lesson time.

With adults, the beginning of a lesson seems to be about building trust, mostly based on safety. Once you have the trust, the true learning and progression in snowboarding can begin. With children it's also important to build the trust,



Play stations pump up the fun factor for kids.



Riglet reels allow instructors to lend greater guidance to young sliders.

but I like to gain this by playing and having fun.

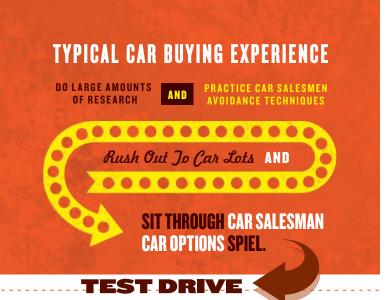
Wait a second, "Playing and having fun?" Did we just go full circle? That sounds like the group of 12- to 21-year-old males from 20 years ago. The difference is that now these people are smaller and in lessons from the start. This was *not* the case 20 years ago. And now, we as instructors have an opportunity to be involved with shaping snowboarding's future, with

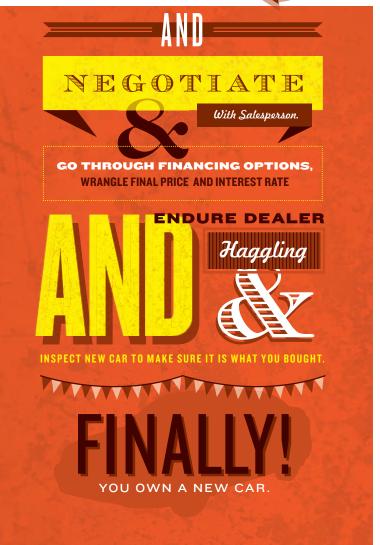
forming the snowboarding families of tomorrow.

WHAT'S WORKING

The resort industry is helping with the development of the snowboard family, largely through children's programs and those geared specifically toward women. Burton Snowboards has been working with resorts to set up small Riglet Parks to introduce snowboarding to children at a very young age.

rrtesy of Smugglers' Notch Ve







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A Riglet Park is built in a flat area and designed for a parent or instructor to actually use a Riglet Reel—attached to the nose of the board—to simply pull a child and let them slide through a terrain-based teaching area. Small moments of independence can be achieved in a totally fun and safe learning/experience-based area.

Let's take look at Smugglers' Notch in Vermont. They took the Riglet Park to the next level, and built a treehousestyle learning area for kids as young as three years old. It's specifically designed as a small skill-building area in a fun environment.

Another example of theme-based learning environments for children can be found at Sierra at Tahoe in California. They have an entire Riglet children's program and area, which includes both indoor and on-snow areas based on a Star Wars movie theme. You can practice your balance skills in the Padawan room while warming up with a hot chocolate, then head out to the Yoda Riglet Park, which features miniature interactive drop-in zones based on Star Wars characters. All this happens before the little ones get introduced to the family fun zone, where they actually start riding moving carpets and taking in a more traditional snowboard lesson.

Other resorts—such as Colorado's Copper Mountain—have programs for three- to five-year-olds, in which they ensure small group sizes and focus on skill building both on and off the snow. Also in Colorado, Steamboat has its Bandits program, geared exclusively to five- and six-year-olds, and which includes early lesson drop-off times, lunch, and group sizes limited to four or less.

In addition, resorts and private groups are also supporting female snow-boarders with women's-specific groups and sessions. It seems like every resort is offering some sort of Women's Wednesdays or a three-day "Girls-Only" session, which feature female coaches and instructors. I hear this all the time when I'm riding with females: "I would try that



Resorts are wise to cater to women riders.



Sierra at Tahoe enthralls kids with a Riglet program that incorporates a *Star Wars* theme.

if I saw another girl do it first." These types of programs allow that to happen.

Other activities tied into women's specific programs are day-spa visits, après wine tasting events, and women's winter fashion shows . . . the possibilities are endless. These types of programs, along with children's programs, can be found on most resorts' websites on the page for the ski and snowboard school.

So given all this full-circle talk—and the fact that in this changing world everybody is getting more involved in snowboarding—let's take another look at that 12- to 21-year-old who was an early adopter of snowboarding and is now in the dad role within one of these snowboarding families. The key is going to be to keep it fun and help him enjoy the time snowboarding with the family—



Women's-specific lessons—taught by female instructors—are proving popular.

because if it's not fun for the kids, moms, and everyone else, then they might start to look for something else out there that's more fun. Do the right thing and give all members of that riding family a reason to want to keep snowboarding! With all the new snowboard gear on the market and resorts offering all kinds of snowboard programs, there is no reason it can't be fun for the whole family. 22°

Scott Anfang, who this year enters his third term on the AASI Snowboard Team, teaches at Colorado's Steamboat Resort. His credentials include Level III Snowboard and Adaptive Snowboard certification as well as Children's Specialist 2. An examiner in PSIA-AASI's Rocky Mountain Division, he was instrumental in developing that division's freestyle accreditation program.

ri Harkin



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Learn to Play, Play to Learn

By STACEY GERRISH

e might not have been a ski or snowboard instructor, but essayist Ralph Waldo Emerson had the right idea when he wrote, "It is a happy talent to know how to play." And who could argue with the wisdom of Fred Rogers (of *Mr. Rogers Neighborhood* fame) who said, "Play gives children a chance to practice what they are learning."

Our students, no matter their age, have an underlying desire to have fun in the process of meeting their goals—and playfulness equates to an engaging experience. When our students are en-

gaged, technical improvement happens more seamlessly.

Children in ski and snowboard lessons expect to have fun, and our older guests expect the same thing (along

Play is the thing that helps cement learning.

with wanting to improve their ability, consider their time well spent, and feel they've gotten value from the lesson). I believe these expectations can be met—first and foremost—through a playful lesson environment.

To bring playfulness front and center, we must recognize limiting behaviors we habitually rely on, and then make adjustments. In their development as skiers and riders, students are usually first captivated by the exciting sensations of sliding on snow and then, somewhere down the line, strive for the perfect turn, on perfect snow, under a perfect bluebird sky. We can't control the weather but we can control the pathway to the perfect turn. When we focus only on the outcome we overlook the bounty of the process, and the success it brings. Discovery and exploration (the process) have power, and playfulness is a key ingredient in the power of discovery.

The perfect turn is based on a standard. The quest for this perfection in skiing or riding leads many students to a fear of failure rather than a feeling of success. When focused on the perfect turn as an outcome, our students will often experience frustration, anxiety, fear, judgment, and struggle. Wow, none of those descriptors sound like fun!

SEEKING THE PATH

The path toward the perfect turn is the process of discovery, which builds self-esteem based on inquiry, creativity, and participation. The process is based on learning while the student experiences fascination, spontaneity, enjoyment, self-



CHILDREN'S

appreciation, play, and fulfillment. In the process there is no failure. Rather, every step is an outcome and an achievement. Sign me up for the process; these descriptors are far more intriguing!

An instructor's ability to help students develop extends far beyond the technical aspects of making a turn. We help them develop confidence, self-esteem, and well-being, plus safety on the slopes and skills for communicating with others who identify themselves as a skier or rider.

Instructors know that repetition leads to a change in a movement pattern, but students—particularly children—often find the repetition boring. Boredom equals lack of interest. We need to be aware of how we structure the repetition or mileage during the process of discovery. This is where playfulness steps in; practice, repetition, and mileage are the opportunity to roll out an atmosphere of play.

To make for a more engaging environment, try using these three words when devising your lesson: connect, create, and relevant. Connect with your students; create the lesson plan with an eye toward creativity and playfulness. And keep the lesson relevant to student needs, goals, and motivations.

Connect

- Use each student's name at least once every run. This helps build the connection with your students. Find out who they are and what they bring to the lesson.
- Catch students doing things right and praise them.
- ◆ Preserve students' dignity—don't use sarcasm. Clients may not always remember what you say, but they will always remember how you said it.
- ◆ The lesson is *always* about them, not about you.

Create

 Maintain a positive, playful atmosphere with plenty of engaging activities and opportunities to interact

THE SWAY OF PLAY

Children's ski and snowboard instructors will find a helpful resource in "The Serious Need for Play," an article by Melinda Wenner that appeared in the February 2009 edition of *Scientific American Mind*. This article (a preview of which is accessible online at http://www.scientificamerican.com/article. cfm?id=the-serious-need-for-play) describes the research of psychiatrist Stuart Brown and discusses the role of free, imaginative play in young children's healthy development. The key conclusions are:

- Young children's play is essential for healthy social, emotional and cognitive growth.
- Imaginative, child-directed play is more helpful than structured play.
- Young children who do not engage in free play are at-risk of developing into anxious, socially maladjusted adults.

-Stacey Gerrish

with you and/or their classmates. Students are on the mountain with you to have fun, and to create memories while they learn.

- → Treat each other with respect: model, monitor, and encourage respect.
- ♦ Show interest in the students' lives off the mountain, and be inquisitive and conversational.

Relevant

- ◆ Focus on helping the students get better, not be the best. Getting better will help reduce their fear of failure and give them the freedom to try new things.
- Use words and concepts the students understand. Check for understanding—often!
- ◆ Take time to have them offer positive comments about their lesson. Encourage the student's dreams and listen to their concerns.

Keep these three words in your back pocket and remember to use them to guide playful lesson strategies. When teaching adults, keep in mind that they often feel guilty for taking time to play because it's perceived as a distraction from "real" work and life. Many think it's childish to play. When you learn to play as an instructor, students will play to learn in your lessons. Numerous studies reveal that play is a biological need and is integral to our health, even as adults. In fact, our ability to play throughout life is an important factor in determining our success and happiness.

Instructors are ahead of the game. Our job is fun and playful! We've chosen a fun lifestyle in the mountain playground. This should be easy for us! Think of some of your best memories. Do those memorable moments have an element of playfulness to them? I'd be willing to bet that they do, because it's often play that lifts us out of the mundane.

OUR PLAY ZONE

Humans have played since the earliest times, and philosophers and scholars have thought about it for centuries. More than 2,000 years ago, Plato suggested, "You can discover more about a person in an hour of play than in a year of conversation."

We can impact people's lives in our lessons and, clearly, student-centered play is an important development need. When we strike a balance between play and technical improvement the result is success! If success is measured by the size of our student's smile, the greater the grin, the more perfectly the turns mark our joy.

Remember, the best lessons are so playful and relevant to the student's level, goals, and motivations that the technical improvement happens seamlessly. Play is fun—and a whole lot more! 52°

Stacey Gerrish is the training manager at Beaver Creek Ski & Snowboard School in Colorado. She is active on the children's task force in PSIA-AASI's Rocky Mountain Division and is a contributing author to PSIA-AASI's Children's Instruction Manual and the Children's Alpine Teaching Handbook.





Help Students Dip Their Tips into the Pipe

By RYAN CHRISTOFFERSON

he term "halfpipe" often elicits imagery of snowboarders catching big air, challenging each other to outspin and outflip their peers. But the halfpipe is all about equal opportunity, and the perfect place to express a similar freestyle focus for those who favor two boards instead of one.

Those new to the pipe need to start with some basic fundamentals, and nothing could be more fundamental than linking turns and getting a feel for the terrain.

The following four-step plan will help you familiarize intermediate-level students with the pipe and set the stage for future maneuvers.

Step 1: THE ANATOMY LESSON

As with any new endeavor it helps to know what you're dealing with, so start out by defining the new environment students will be exploring (fig.1). A halfpipe consists of five parts. The flat bottom is, like it sounds, the flat portion of the halfpipe that runs down the center line between the walls. The transition is the section of the pipe located between the flat bottom and the vertical part of the wall. The vert starts at the end of the transition section, where the wall becomes vertical, and extends straight up to the top of the wall, known as the lip or coping. The

deck is the flat ground at the top of each halfpipe wall.

Step 2: CREATE A COURSE OF ACTION

When introducing students to pipe riding, a good starting skill to have is the ability to make round, complete turns on blue terrain. One exercise before taking students into the pipe is to focus on having them make consistent round turns in a corridor, such as two groomer tracks side-by-side. As you lead them through this exercise, review the parts of a turn.

- 1. The **initiation phase** occurs when the skier starts to move the body toward the center of the new turn and flatten the skis under the body.
- 2. The **shaping phase** is the section of the turn during which the skier guides the skis through the turn.
- 3. In the **finishing phase**, the skier finishes the turn and starts to prepare for the new turn, decreasing



edge angle and letting the skis start to move back under the body.

Step 3:TAKE THE PARTS OF THE TURN INTO THE HALFPIPE

Have students enter the halfpipe—one at a time—in the flat bottom and start to make a few turns. During their first few runs, they should only ski as high as the transition. Coach them to use the flat bottom portion for the completion and initiation phases of the turn, starting the completion phase as they come down the transition and then finishing the initiation on the new transition.

They'll want to use the shaping phase to cover some distance down the length of the halfpipe. As they slide back down the wall, have them start moving into the finishing phase. They will have made a handful of round, complete turns down the pipe.

As students become more confident, encourage them to ski higher and higher up the wall, working their way up until they are just below the coping. As the

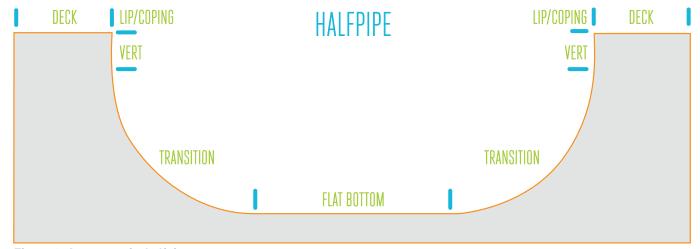


Figure 1: Anatomy of a halfpipe

skiers move farther up the wall they will be carrying more speed, so emphasize the need to start the initiation phase closer to the vert and coping portion, and the completion phase as they are exiting the vert back onto the transition.

As students near the coping, they will start to feel a sense of weightlessness during the shaping phase. Tell them to enjoy the rush; they'll get the same feeling when they start to move above the coping.

Step 4: GET COMFORTABLE

By taking the parts of the turn into the halfpipe and practicing to refine their rhythm and timing, your students will gain confidence and grow more comfortable riding up and down the wall. Eventually, you can coach them to add some flexion and extension to the drill to join the

airborne snowboarders . . . but that's a lesson for another day. **32°**

Ryan Christofferson grew up skiing/instructing in the Northwest and is now the head freestyle coach at Northstar California and head ski trainer at Woodward Tahoe. A member of the tech team for PSIA-AASI's Western Division, he was named to the 2012–16 PSIA Alpine Team as a freestyle specialist.





Why One of Freestyle's Original Concepts Still Matters

By DAVID OLIVER

he ATML Model, which, as we all know, covers a freestyle approach, takeoff, maneuver, and landing, has been described as everything from revolutionary to lacking. Many things to many instructors, it is the creation of 10 people who made up the original PSIA-AASI Freestyle Taskforce over a decade ago—a group, I am proud to say, of which I was a part.

This model has now been integrated into education and programs across the country. What is most exciting is that ATML continues to evolve, and you can find it being integrated into almost everything in our snow world.

In a realm of ever-changing tricks, envelope-pushing, and reinvention, it seems unlikely that a model developed over a decade ago would still be valid. How could it possibly still be reflective of what's happening in the park and pipe when freestyle itself has changed so much? Yet ATML is exactly what the halfpipe world is rocking at this moment.

Although ATML was simply a concept that describes the breakdown of a feature in its infancy, it has since evolved to encompass a model for living, working, playing, and all things in between.

The historical and future validity of the ATML Model comes from its simplicity. What we've learned is that this model stands alone as a fundamental core teaching concept. And regardless of an individual's personal modifications or additions to make the model easier for them to use or grasp, much like gravity, there is no denying the basic principals at work.



ATML still forms the freestyle foundation that helps us soar.

For example, there are some that could argue that the steps of "Setup," "Prep," "Store," or "Ready" should be added to the ATML Model in order give it better application. Yet all of these terms explain a behavior that takes place during either the approach or takeoff phases. We are describing behaviors of a person moving through the ATML Model. Like the genome project, it is our key to unlocking any freestyle feature or trick, allowing us to break them down and understand them. Understanding where things happen is paramount to the learning process.

ATML OVERVIEW

Let us lay out a brief overview of the ATML Model, starting with the approach phase. In this phase, the skier or snowboarder should be acquiring speed as well as lining up the feature about to be navigated. There is always a "go/no go" point at which they can choose whether to continue with the feature. Next, they move through to the all-important takeoff phase where set-up turns, pre-winding, transition pumping, and projection movements occur.

Most people get the takeoff confused with a movement or behavior, and single it out to the very last moment before leaving the ground. In fact, the takeoff starts long before the actual movement of leaving the ground. Speed is no longer being added; rather it is being managed and maintained. Here the skier or snowboarder sets in motion *all* the things that will help him or her perform the trick, spin, or coolness that happens in the maneuver phase.

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FREESTYLE

The maneuver phase usually includes a floating feeling, but not always. It is where all the calculations and movements have resulted in some kind of awesome and stylish manifestation of our movements. The success of what happens during this phase is completely dependent on what the skier or snowboarder did during prior phases.

Finally comes the landing phase, where you come back to earth regardless of calculations or performance on prior phases. Movements experienced in this phase usually entail some type of absorption from the body to help alleviate some of the forces of impact. The ATML phases exist regardless of whether the "pilot" makes a good jump or not—they exist when someone crashes as well as when they stomp the landing.



The maneuver phase puts prep and calculations to the test.

WHERE, WHAT, AND WHEN

The ATML phases are indisputable when it comes to breaking down a feature in the park and pipe. Yet the confusion begins when we begin to replace the ATML with actions instead of location; attempting to plug movement skills like "speed," "pop," and "spin" into the phases of the feature and have them as static and inalterable as the feature itself.

The skills are always changing and the timing, intensity, rate, and duration (T.I.R.D) of those skills is what gives us our trick. ATML is the "where," the skills of speed, pop, and spin are the "what" and T.I.R.D. is the "when."

Think back to the competitive diving at the recent Olympics. Even this can be broken down with the versatility of the ATML Model. When we look at the initial area of the diving board where the diver gains speed, we see the approach phase. The second portion of the diving board represents the takeoff phase, where the action for the set-up of maneuvers occurs. The air represents the maneuver phase, and



the water represents the landing phase. Regardless of the trick or the athlete, it is important to be able to identify the phases of ATML to begin to break down the actions taking place in each phase. ATML is applicable for all types of features on the mountain as well.

There is often a desire to establish a specific coaching cue using ATML as behaviors for a rider. Understandably, this can be effective for learning a specific trick in a static environment. However, in doing this, you limit the behaviors needed to adjust. We would not teach students to *only* do a wedge turn. That would be limiting to them. But we do teach those turns where they are useful, giving the wedge-turning student the option and choice of where and when to use it.

Similarly, by giving the freestyle rider an understanding of ATML, we give them the knowledge of where to make adjustments on their own for any trick, in any environment. If we stay away from using the ATML phases as movement cues, then we will be more successful in presenting the info to our athletes.

WATCH YOUR LANGUAGE

Instead of using language such as, "Just before you take off, try pulling your chest toward the sky then torquing toward your left shoulder," it is more beneficial and accurate to a rider's understanding to say, "During the takeoff, you should have your set-up turns dialed in, which should put you in a good posture to allow you to pull and torque your spine toward your left shoulder."

The difference in the description is that the second example uses the takeoff as a "where," and identifies what actions to effect during this phase, while the first refers to the takeoff as a "what," and just gives the rider a specific description of movements to make. But without the knowledge of where to make the adjustments, the rider is left with an abrupt movement pattern.

In addition, if the student leaves without an understanding of *where* to make the adjustments, and takes away the movements as the primary focus, they will be challenged when relying on these movements when trying a different trick or the same trick on a different jump or snow condition. The movements are not the same every time for every person, and that is the largest oversight when we try and teach specific movement cues versus teaching the application of the ATML Model. As I said earlier, this concept is revolutionary, effective, and life changing, *if* it's utilized like the phases of a turn.

It is how we use the skills, in the phases we have, that make us good riders or not. Think of ATML as a blueprint for *where* things happen, then break down the skills, behaviors, cues, and movements being used within those phases. ATML has not changed, but how we use it has. If we remember that these are places to do things, and *not* things to do in places, we will be able to describe, use, manipulate, and coach ATML like never before. \mathbf{Z}°

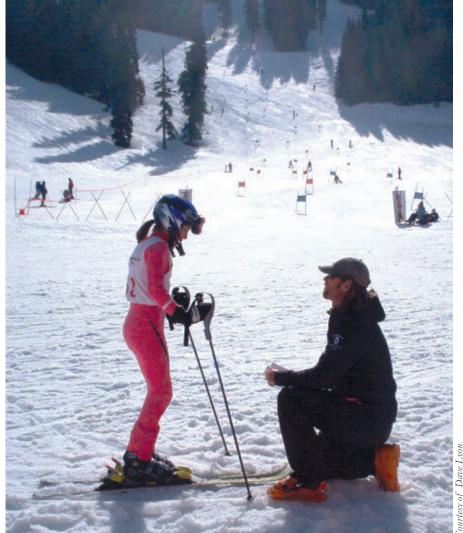
David Oliver is a lifelong student of freestyle and as well as co-creator of ATML. He's also a freestyle specialist on the PSIA Alpine Team (recently named to his second term), and serves as the Freestyle Education Chair for PSIA-AASI's Rocky Mountain Division.



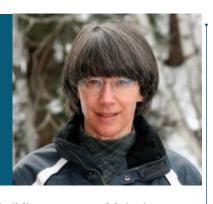
Sense of Team Sets Course for Young Racers to Be Instructors

By Ellen Post Foster

hat makes the experience of being on a team so constructive for a young person that he or she develops a lifelong passion for skiing and the desire to become a ski instructor? Well, it all comes down to camaraderie and a spirit of community that allows young people to grow in a fun environment.



PSIA Alpine Team member Dave Lyon, who is the program director of the Stevens Pass Alpine Club, coaches a young team member.



By building a successful junior team within your ski school or becoming involved in an existing program, you can win young people over to the sport and build a talent pool of future instructors.

A junior team setting can provide the scenario for a supportive community in which young people learn important values while pursuing athletic accomplishments. Someone who understands this fully is PSIA Alpine Team member Dave Lyon, who champions this philosophy within the junior race team he has directed and coached for 10 years at Stevens Pass, Washington. Lyon recently united his group, Team Lyon, with the Stevens Pass Alpine Club, and now as program director his leadership reaches an even greater number of young people.

At the beginning of each season, Lyon spends a lot of time on team-building activities that are governed by three rules: be respectful, be responsible, and have fun. He teaches that the only two things any athlete can control are attitude and effort. Team members learn to take responsibility for their own actions, diminishing the negativity that arises when the focus is allowed to shift to comparisons between teammates.

"This philosophy over time has taught kids to embrace their differences and similarities, enjoy each other, and know they'll be treated with respect in return," Lyon says. "I want to provide an environment where they feel safe and each person is challenged to be the best person and skier he or she can be."

A FOCUS ON SKILLS

A successful team dynamic also requires a technical focus anchored by a solid foundation of fundamental skills. Without this, the group will struggle to



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COACH'S CORNER

meet its potential—collectively and individually. Learning to ski well is a prerequisite for learning to ski fast safely and for mastering the challenges of demanding terrain and snow conditions.

This concept is at the heart not only of Team Lyon's approach but also that of the United States Ski Association's new, nationwide training system called SkillsQuest. At its core, the system promotes skill development as an integral part of advancement at all age and ability levels (for more information on SkillsQuest, go to http://alpine.usskiteam.com/alpine/skillsquest).

At the Stevens Pass Alpine Club, skill development is paramount for reaching long-term goals in racing, according to Lyon. "I have high expectations for skill, and I don't compromise on what is good skiing for the sake of a faster trip to the podium," he says. "I spend a lot of time telling kids why they need to make the changes they're being asked to make. I expect them to be able to repeat back to me the focus of their training."

athletes, forming the connections that encourage enthusiastic lifelong participation in alpine skiing, notes Lyon. Coaches have a tremendous opportunity to make a lasting impression by sharing their knowledge and providing inspiration.

As with any good teaching-learning relationship, gaining insights from the young people you coach is just as important as having a plan and direction for each day. To evaluate your effectiveness, make a point to visualize skiing through *their* eyes—listen to their responses, watch their interpretations of demonstrations, and ultimately observe the changes they make in their skiing. If a desired outcome is not achieved, regard it as an opportunity to look for a new approach before the next team practice.

PAYING IT FORWARD

The skiing and life skills that young people gain as team members allow them to make a smooth transition from being a student to becoming a teacher. Lyon says he's found that these young skiers have such a positive experience on the team, as part of the team, that they want to give that experience to others.

I have high expectations for skill, and I don't compromise on what is good skiing for the sake of a faster trip to the podium. I spend a lot of time telling kids why they need to make the changes they're being asked to make.

That's why—before any critique is given—the first question Lyon's coaches ask their athletes after each run is: "What are you working on?" Over time this helps kids build an understanding of the sport and develop self esteem. "They recognize when they make skill improvements and feel proud," Lyon says.

The expertise of the coaching staff is essential to the success of team members. Further, instructors and coaches need to build relationships with their

"They don't want to lose something that has become a very important part of their lives," he says, citing numbers to back up his claim: of 17 Team Lyon graduates, 11 taught ski school for one or more seasons and obtained PSIA Level I certification while they were still racing. Six have continued on to earn their PSIA Level II certification (three teach or coach full time and three teach or coach part time). And Lyon currently coaches four more racers who



Through team participation, individuals can develop a lifelong love of skiing.

have also earned their PSIA Level I certification and teach for his ski school while they race.

Former Team Lyon member Bre Huston became an instructor after years of ski racing. "Being on the team was my biggest focus growing up," she says. Inspired by her coaches she is now an instructor at Big Sky Resort in Montana. "Teaching became my new challenge and also the reward."

Ingrid Cooper, another Team Lyon alum, says her junior team and ski instructing experiences are what led to her position as head coach for kids ages 10 and younger at Northstar in California. "As a member of the Lyon race team I never felt like an individual athlete but instead as a member of a family, with all of us working together to achieve our goals," she says. "We were taught to be grateful and gracious athletes, to respect the mountain and elements, to trust ourselves, and to always have fun. What I valued most about my coach [Dave Lyon] was his patience and willingness to listen. He taught us to love the sport of skiing, not of racing; love of racing was second to skiing."

Cooper says her experiences as a junior team member shaped her racing philosophy and the manner in which she coaches. "I hope my athletes will become diligent, respectful humans who follow their dreams and begin a lifelong love affair with the sport of skiing," she adds.



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COACH'S CORNER

THE PATH TO PSIA ALPINE TEAM

My own experience as a member of a junior ski team led to my love of skiing, my career as an instructor and coach, and close friendships that continue today. Just as my friendships have lasted the test of time, the elements of a successful team have also proven to be true: the accomplishments and contributions of the members of our small team, the Jiminy Peak Junior Demonstration Team in Massachusetts, had far-reaching effects in the years that followed.

The team began in 1968 as a ski school program for young people to improve their skiing and to gain the skills to become instructors in the future. We practiced the "final forms" of the American Ski Technique (stem turn, stem christie, parallel christie, and shortswing) and exercises to refine our movements. Like Dave Lyon, our coach had high expectations for our skill development and as he challenged and encouraged us, our team drew closer together. We learned to master our turns as we shared disappointments, determination, breakthroughs, accomplishments, pride, and most of all, friendship.

My teammates transferred the skills, lessons, and passion for skiing they'd learned into their personal lives as well. Many became ski instructors or coaches in one or more disciplines and achieved corresponding certifications in alpine, racing, nordic, snowboard, and adaptive snowsports. The development of their fundamental skills provided a foundation from which they excelled in freestyle skiing, racing, telemark skiing, and even nordic jumping (breaking three hill records). Four members of the team competed on international freestyle skiing tours and won ballet, mogul, aerial, and overall competitions. Marion Post was a two-time Women's World Freestyle Champion and fivetime Women's World Ballet Champion. Three team members have become prolific ski writers, authoring numerous



For 10 years, Tom Tuggey, age nine in this photo, was a member of the Jiminy Peak Junior Demonstration Team and the Junior Freestyle Team that it became. He was a member of the U.S. Freestyle Team from 1979–81, and went on to be a freestyle and race coach.

"We were taught to be grateful and gracious athletes, to respect the mountain and elements, to trust ourselves, and to always have fun."

—Ingrid Cooper

instructional articles for various ski magazines including *The Professional Skier* (the predecessor to *32 Degrees*). One team member is currently the producer and director for Warren Miller Films. I followed my childhood dream and became a member of the PSIA Alpine Demonstration Team (1980–88). Most importantly, the members of our team continue to share their passion for skiing with their families and friends.

YAY TEAM!

A positive team experience can instill in young people a passion for skiing and help them develop the skills and desire to become the next generation of ski instructors and advocates for our sport. Current programs as modeled by Dave Lyon through the Stevens Pass Alpine Club prove that this approach is very effective. By creating or instructing in a junior team program, you can contribute immeasurably to the lives of the young

people who will carry our sport into the future. 2°

Ellen Post Foster's team experience includes being a member of a junior team, the head junior coach for teams in Colorado and California, and a member of the PSIA Alpine Demonstration Team. She is a boot technician at Ski Boot Fitting, Inc. in Vail, Colorado, http://www.skibootfitting.com.



For more on Dave Lyon and his remarkable ski school and race program,

check out this link to a cool video on The Snow Pros You-Tube Channel: http://youtube/ki-MJ4I9QvQ. The segment is featured in the 2012 Go With a Pro television program.

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THROUGH THE LENS

An old-school fashion rule has it that proper clothing after Labor Day. keeps us from seeking the fluffy white year-round. Obviously Robbin Comiski (Alpine I) and Peter Comiski (Alpine II) in Newtown, want to miss first tracks.

INQUIRING MINDS

2012 issue we asked readers what they will focus on to be mentally ready for the snow season. Central Division member Paul Bowman (Alpine III) recently had a rod removed from his tibia-after three years mending. Here is his plan of action:

"It really helps me to mentally prepare for the upcoming season, and be able to recreate positive experiences in my mind. I concentrate on how something felt, like which part of a turn I preformed the best, or what freestyle maneuvers I stomped in a competition. I focus on things where I walked away from it and it felt good. I also relive in what my clients have done. I take those feelings and envision myself performing at the same level-or higher. Designating performance goals or results are what I want-something that's really going to help my season. I want to successfully walk into a session with goals that are legitimate and realistic." Our next "Inquiring Minds" question is:

What's the best thing your supervisor ever did to help you with a lesson?

Super Scenes

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