BUILDING BETTER RIDERS

words & photos Vince Shuley

ZEP TECHNIQUES AND THE SIX SKILLS OF SHRED.

Since the birth of the sport of mountain biking there has never been a definitive method for learning the skills required to ride a mountain bike. You hit the trails and ride them as well as you can, learning what works for you and what doesn't. After a while you learn to deal with steeper and more technical trails and you get quicker at them. Or, alternatively, you don't, and you hit a ceiling in your riding. For many of us, talent only runs so deep. The rest is made up by our determination.

There are any number of great coaches out there who can help improve your fitness, strength and develop a training program with you. What is lacking, however, are coaches to guide riders in the skills side of riding. Unlike, for instance, the snow industry, there has never been an authoritative standard for progressing mountain bike riding skill. This holds true not just in Australia but all over the world. Two years ago Canberra rider Matt Szabo had a pipe dream of running a business that provided effective skills training to all riders, from beginners to elite racers. He began the search for a training mentor.

"When I was looking to start up my own rider training program in Canberra I realised I needed to improve both my riding and my teaching technique. I looked here in Australia and didn't find any camps or skills programs that were in depth, effective or 100% complete. I branched out the search to overseas, determined to find the best rider improvement program in the world."

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"YOU DON'T MASTER THE SITUATION, YOU MASTER THE SKILLS"

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01. Paul Howard on the Whistler valley trails. **02/03.** Big lines. This is what Whistler's got in spades and why it's the perfect place to advance your riding. **04.** Paul Howard with his students, Matt and Nathan.

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THE BEGINNING

That's when Matt found exactly what he was looking for. Based in Whistler, Canada, ZEP Techniques run a series of mountain bike camps and Professional Mountain Bike Instructor (PMBI) courses throughout the Canadian summer. After many months of email discussion and deliberation, Matt decided that signing up for a four week Instructor Training Camp on the other side of the world was the only way he was going to get a solid start to his business.

Matt was determined to go, but knew it would be more fun if he had a friend along for the ride. Nathan Spencer (a born and bred Canberra local and cross country/enduro racer) had been introduced to Matt through a family friend. They met at a cafe and discussed the idea of flying to Canada to attend a month long camp with ZEP. Nathan signed on for the trip that day. Matt had found his wingman.

WHISTLER BOUND

Like any mountain biker visiting Whistler for the first time, Matt and Nathan were simply blown away. Chairlifted riding on some of the most technical and progressive trails in the world is enough to make any rider weak at the knees. While the Whistler Mountain Bike Park is glorious, it can also punish you. Season-ending injuries await those who do not tread carefully. But these two Canberra boys had an ace up their sleeve; they had Paul Howard.

Originally from the UK with a Bachelor's Degree in Genetics, Paul cut his teeth back in 1999 as a MTB instructor at Blue Star Camps in North Carolina, USA. Over five summers Paul spearheaded numerous coaching programs, developed original instructor courses and oversaw the construction and maintenance of over 40 cross country and downhill trails. Later relocating to Whistler, Paul found his winter niche as a snowboard instructor and currently holds the position of Head Trainer at Whistler Blackcomb Snowboard School. He founded ZEP Techniques in 2006 when he ran his first ever PMBI course. His instructor training camps are now sought after by bike parks all over North America.

What separates Paul from the dozens of other mountain bike schools around the world is his technique; rather than situational based instruction (i.e. if you encounter this, do this), Paul focuses on six fundamental skills of mountain biking, all of which are applicable in every on-trail situations. You don't master the situation, you master the skills - that way the skillset can then be applied to whatever scenario it is you encounter in the real world. As Paul points out, every trail situation is different.

Matt had difficulty believing how logical it was at first, but he now gets similarly impressive results when he trains other riders using Paul's method.

"People don't understand how much more effective teaching and learning is when you break it down. All the elements that Paul introduced were simple, logical and presented in such a way that it changed my riding each session. With the gradual introduction of the six skills, he was able to refine my riding in a way I never imagined."

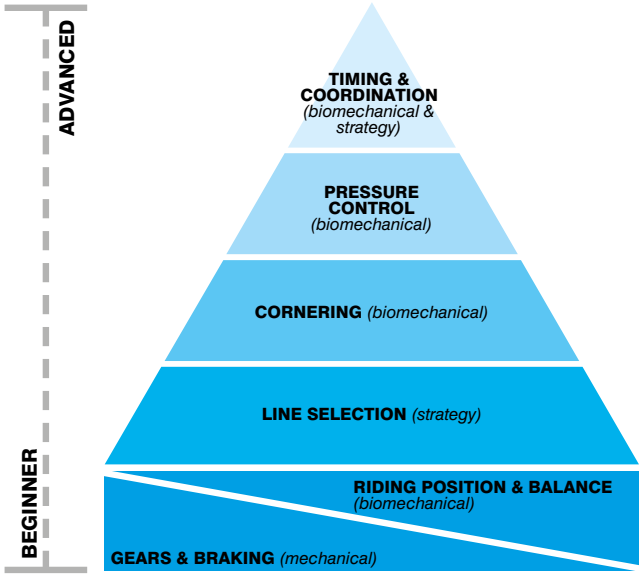
While Matt had had a clear goal of what he wanted to accomplish during his stay in Whistler, Nathan's expectations were at the very least to have good time and to ride some of the world's best trails.

"I went over to Canada with my BMX and motocross background and a couple of years of mountain bike riding, predominantly cross country. I had four weeks of riding camps and instructor courses so I decided to take it easy and follow Paul's lead. We started slow but soon we were hitting more advanced trails and tackling tougher terrain. With Paul's knowledge of the mountain and ability to break down our riding to the fundamentals, we were improving our skills and increasing our speed every day with absolute confidence."

Nathan is a changed man after his experience in Whistler. With little or no shift in his fitness regime (or beer drinking regime for that matter) he has had solid improvement in his race results. After returning from Whistler he was invited to ride with the Redswell Shift team for the Scott 24 hour, setting competitive lap times. He also recently won his first ever eight hour Enduro at Mt Stromlo. The difference, he says, has come in how he approaches the trail.

"The way I used to race was to go out and grind out the climbs and then just flog myself on the descents and the technical sections. I would feel mentally drained repeating this lap after lap. Now as I approach a corner I'm thinking about all the fundamentals - What kind of corner is it? Am I in the right gear? What's my cadence doing? Is my body position correct? Where and when should I be braking? With all that information it's a little overwhelming at first but after a while it becomes second nature."

Whether you are new to the sport of mountain biking or you've been racing for years, there is always something new to learn. Matt's new company, Bike Techniques Australia, operates out of Canberra and offers a range of clinics and rider improvement camps using the PMBI six skill progression. If you are looking for the ultimate training camp and want to try your hand at becoming a certified instructor, head over to Whistler and ride with ZEP Techniques.



AN AFTERNOON WITH PAUL HOWARD

I'd heard so much about ZEP Techniques that I had to see it for myself. On a sunny autumn afternoon I managed to schedule a couple of hours' ride with Paul around Whistler's Lost Lake Trails. He begins by highlighting how his teaching method differs from that of his competitors.

"Teaching mountain biking is still fairly new. Over the years, most mountain bike tuition has come from magazines, written by editors and enthusiasts. Many programs out there follow this old school method of situation based teaching, like 'how to ride over roots' or 'how to attack a corner'. You can learn that information but you can't apply it elsewhere. If you teach someone different body positions on their bike they can apply that to all different types of situations. Whether we're training people to ride better or training them to become instructors, we always stick to the six skills. "

Skills based teaching has been a proven method over the last forty years, an excellent example being the snow sports industry. The ZEP Techniques PMBI Manual (all 139 pages of it) begins with the theory of the six fundamental skills of mountain biking. Paul gave me a run down on each skill and how they interact.

MECHANICAL SKILLS

Gears and Braking

"The most efficient range of cadence regardless of the rider's strength, fitness, speed and the gradient or surface they are riding on is 60-90 rpm. Staying in this range with correct pedalling technique allows the most efficient torque transfer and greater control whilst minimising suspension bob.There are multiple disadvantages of braking including reducing speed, reducing tire traction, stiffening the suspension and upsetting the bike's geometry. Riders are looking to find the balance between bike control and bike performance whilst braking."

BIO-MECHANICAL SKILLS

Riding Position and Balance

"This is where basic physics comes into play. The rule of thumb is to keep the centre of mass (the rider's body) as close as possible to the base of support (the bike on its wheels). As the terrain changes, so should the body position to keep the weight centred over the bike at all times. As the foundation for all the other bio-mechanical skills, balance needs to be addressed before progressing into the other skills."

Line Selection

"Every section of trail is different and whether the rider chooses the safe line, the race line or a combination of the two, it will generally be based on their ability level, experience and confidence. The rider will also have to adjust their riding position accordingly, as well as selecting the appropriate gear and deciding where and when to brake."

Cornering

"Coming back to physics, cornering (or making the bike change direction) is possible through steering and leaning. Different types and shapes of corners require different amounts of steering and leaning. The more advanced techniques include counter steering and bike-body separation."

Pressure Control

"The changes in forces that the rider feels as they roll over the terrain can be controlled either passively or actively. For example, by relaxing the limbs the rider's body will act as a suspension system to passively control the forces they feel. Force application, such as wheel lift, is a way of actively controlling that felt pressure."

Timing and Coordination

"The last of the skills involves putting all the previous skills together at the right time and place. How quickly or slowly techniques need to happen and the sequence in which they happen is the key to refining advanced/expert riding." ***AMB***

01. Paul Howard. When he's not instructing, he's trying to skim bikes across the lake.
02. Regardless of what kind of terrain you're tackling, from cross country to downhill (here) the same six fundamental skills apply.

FOR MORE INFORMATION:
ZEP TECHNIQUES – Instructor Training and Rider Improvement Camps in Whistler, Canada ***www.zeptechniques.com***
BIKE TECHNIQUES AUSTRALIA –Skills Clinics and Coaching based in Canberra ***www.biketechniques.com.au***