

Carl Valle's Interview with Boo Schexnayder for Speedendurance.com

Q1 – SpeedEndurance.com: A lot of confusion and mystery lies with the true volumes of jump training that is sufficient for stimulating neuromuscular adaptations and teaching. While small doses are often looked at as the goal, teaching takes repetition. Could you expand on how important the sequence of the training year and the quality of foot strike? Can you explain why it seems that some programs thrive off of higher volumes while some just lead to injury?

BOO: As far as foot strike, the ability to properly dissipate impact forces through full-footed landings is obviously a huge help to staying injury free while jump training. I think there are two other, more subtle keys to successful progression and remaining injury free in jump training. The first lies in variety, specifically advancing training cycles in a timely fashion. The other is taking a purposeful approach to the process.

Just as athletes do, we as coaches tend to settle into comfort zones. You get your athletes doing particular forms of jump training. Then, as mastery is approached, it's time to move on to something else, but our natural tendency is to breathe easy and admire our work for a while. Periodic shifts in exercise choice, volume and intensity are critical, even though they might make life for the coach tougher. Successful higher volume programs do this and show a bit of a pioneer spirit.

Also, everything done must have a very specific purpose. That purpose might be establishing initial volumes, technical development, high end or low end elastic strength development, or whatever. It's easy to fall into a "this is my fallback workout" philosophy if you are not targeting something specific. This is the primary rationale behind the small volume programs, and I think this is the key with high training age athletes who have already accumulated injuries and other physical issues over the course of a career.

In either case, whether it is failure to progress or mindless repetition, at this point jump training quits being a stimulus and becomes simply another piece of baggage that must be carried around that increases injury risk.

Q2 – SpeedEndurance.com: You mention that Olympic lifts are great harmonizing agents to a program. With your experience could you address what mechanisms and systems such as posture and coordination enable the lifts to transfer to sprinting and jumping?

BOO: The results I see in my program are the main reason I feel strongly about using Olympic lifts. I don't want to give anyone the impression that I researched them first and then started to use them. My personal journey was more of a matter of seeing huge gains and then figuring out why.

I think the orders of joint firing and the mixing of absolute strength, power, and eccentric activity show huge transfer into sport specific skills. Also, the need to stabilize the core while performing something functional like an Olympic lift does

more for the body's core than all the crunches in the world. In short, they are highly functional.

I am a fan of functional training. But I have never gone completely that way, always keeping a base in more old school approaches. Maybe it's because I started my career in football, but it's also because I have watched too many great athletes train that way to scrap it.

I think a key variable in strength training is the amount of muscle tissue activated in the course of a repetition. That variable, more than any other, affects blood chemistry and endocrine responses. Many exercises are functional but don't elicit enough muscle fiber activation to accomplish this. Olympics are where gross movements meet functional training and old school meets new school.

Q3 – SpeedEndurance.com: The triple jump requires a great pelvic orientation to sustain velocity. One of the hardest things is to help intermediate athletes distribute the phases evenly with slightly different expressions of power within each phase. Could you share what training aspects seem to make an impact with keeping the rehearsals of the task close to competition but submaximal enough to train throughout the week without excessive fatigue?

BOO: As far as pelvic orientation and phase distribution, the key here lies in the basic concept of teaching throughout the multijump training program. 90% of triple jump technique must be addressed outside of what one might call the "triple jump practice". While most coaches get this, some key parameters are often overlooked, and unfortunately too much coaching time is wasted on things that seem to be the body's default setting anyway.

I get hundreds of coaches each year who write, asking me to help fix phase distributions. I don't mind, but I also always want to ask the question, "did you put this athlete through a patient progression of multijump skill teaching before throwing them in the event?"

As far as approaching meet intensities to insure stability in technique before competition, I frankly don't think you can. This event is truly unique in that competition specific practice results in the inability to perform in a meet. The pounding associated with these types of practice intensities makes jumpers apprehensive and causes accumulation of too many physical problems to compete well.

In this event I have always taken a unique approach of keeping things calm in practice, and approaching the meet with a "leap of faith" mentality. It works because the athletes feel great and are excited about competing, rather than being worried about protecting a heel bruise or some other ailment. The meets themselves become a big part of the technical progression plan and the athletes understand that. I always want the athlete going into the meet feeling great and thinking they can, rather than going into the meet beat up and apprehensive. If you

are going to get that close to competition intensities, you are better off in the high adrenaline, sense-of-urgency environment of competition.

Q4 – SpeedEndurance.com: You have some great rehabilitation strategies including a focus on intensity while most of the legacy methods are dated. What was your experience in dealing with injuries before this enlightenment? Many coaches are often managing injuries because much of the rehabilitation methodology is so backward some elite track coaches are often scripting the medical side. Any specific thoughts?

BOO: I guess I experienced the same frustrations most coaches feel when they see ineffective rehabilitations. The typical vicious cycle: the athlete isn't progressing, then the trainer increases the volume of the ineffective stuff rather than critically evaluating the program, then the athlete stops going to rehab because it not working, then the trainer blames the failure on the athlete's absence. It's happened millions of times. As a coach who was always interested in the process as much as the end results, what frustrated me was the lack of a systematic approach to rehab, absence of systematic progression of some key variable.

I definitely stop well short of incriminating a profession, but unfortunately there are many persons entrusted to carrying out rehabilitations that are simply not purposeful in their work. The basic premise is that throughout the rehabilitation process, the tension levels applied to the injury site must progressively increase until they reach competition level intensity. This seems to get lost in a maze of sets, reps, and pet exercises. In rehabilitation sets, reps, weights, exercise choices, etc. are tools, but the key variable to progress is the tension level applied. This might be subjective, and this is where wise exercise choices come in.

Compounding this is a frequent misunderstanding of the differences in concentric and eccentric work. Tension levels in eccentric work can be as much as 200% of maximal concentric work tensions. Since competition is eccentric, it's easy to see why concentric rehab only gets you so far and at some point rehabilitation must become eccentric. I have seen purposeful applications of eccentric work in rehab accomplish in three days what three months of concentric work couldn't.

Q5 – SpeedEndurance.com: While cues and verbal communication are not essential, many exchanges with athletes help them prepare for bounds, jumps, and hops. You have mentioned that skips have a rocking chair roll but could you share how you get athletes to have quality technique with a combination of tasks and cueing? The cliché "the ground is hot" is a staple for some coaches but I am sure you are thinking beyond that. What do you do in terms of getting athletes to have great technique without paralysis by analysis in terms of too much verbal feedback?

BOO: This is a great question, everyone thinks about the teaching and the technique but nobody ever thinks about the classroom. The exercises or drills you choose are a critical component in the entire teaching process. They must give you a chance to address all the technical components you need to address, and should follow some sequence that makes pedagogical sense and challenges the things

you've taught in a controlled way. Just because I am known as an "anti-drill" person, don't think I don't give lots of thought to this. The exercise groups you see in my training inventory are assembled that way for pedagogical purposes as much as any other reason.

That being said my technical checklist is very short, and so must yours. I address overall rhythm, trajectories, and the swing leg. That's it. Any other error is almost always a symptom of a problem in one of those. Even postural issues are embedded for you in this teaching system.

I mentioned earlier that most coaches spend too much time teaching things that are default settings. Unless poorly taught previously, even the worst athletes inherently do far more right than wrong. For example, heel to toe, rolling contacts are important, but athletes do them naturally. I think of them as a default setting. So, if they aren't happening, my thought process is that instability due to incorrect trajectories or a backside dominant swing leg are producing the problem. Poor swing legs result in poor pelvic alignment. Poor amplitudes of movement, excessive ground contact times, or insufficient ground contact times are related to rhythm.

The trick to being effective in teaching these skills is to develop an understanding of these cause and effect relationships. Understanding the body's natural reactions to distress and instability are the key to efficient coaching and understanding those relationships. That's why I make it a point to address this in any biomechanics course I teach.