Speed - Transform Slow to Fast

I'm addicted to speed. This is why I am a track coach and a sprint/relays coach.

Run fast to get fast. You don't get fast by running slow. You don't get fast in the weight room. You don't get fast by running with a parachute on your back. You don't get fast by running up or down hills or pushing sleds or running stairs or wearing ankle weights. **Run fast to get fast**. It's all so simple.

Before you get too excited, remember the immortal words of jazz musician Thelonius Monk, "Hey man, simple ain't easy." In addition, this transformation will not happen overnight.

I get so sick of those snake oil salesmen who advertise quick fixes to improve speed. Speed training is a process. Speed grows like a tree. I am a teacher and a coach.

Everyone wants instant results. Everyone wants the answers before they take the test. Everyone wants a short cut. If you fit in this group, please stop reading now. Go back to your quick-fix life. Take a pill. Buy a lottery ticket.

As track coaches, we love those "gifts from the gods". We love panning for gold and finding that once-in-a-lifetime sprinter.

Once in a while you get a sprinter who is genetically destined for greatness. If you are a track coach or a speed coach and you haven't read "The Sports Gene" by David Epstein, you are a pretender. Read. Anyway, its obvious to me that we don't "plant beans and grow corn". The elite sprinters are truly FOUND and not created.

It's strange but when you go to a clinic, you see presentations by coaches who were blessed with a freaky sprinter or two. We all want to know how coaches create such an athlete. The presenter hides behind a sophisticated and complex PowerPoint that overwhelms the crowd and makes everyone feel inferior. Remember, the presenter is the beneficiary of genetic talent and deep down, he knows it. It's like shuffling a deck of cards and playing solitaire. Winning and losing is predetermined after the shuffling. College coaches don't create speed, they find speed.

Off-season training relies on 40m training because the 40m requires work on the only two things that matter in sprinting, the DRIVE PHASE and MAX SPEED

1. Running Mechanics

It's easy to get lost in the complexities here. For example, the single most important characteristic of speed is vertical force. All world-class sprinters have ground contact times of close to 0.08 seconds ... eight hundredths of a second. It takes an enormous colossal force to achieve ground contact times that are measured in hundredths of a second.

But even the experts can be mystified by vertical force. "Put simply, fast people hit the ground more forcefully than slow people, relative to their body weight

There are two phases to sprinting ... the drive phase and max speed. Drive phase is mostly coaching. Speed is mostly talent.

The drive phase is hard to teach. Young runners want to stand up straight, spin their wheels, and start running. If they start in a three-point or four-point stance, they still get to an upright position as soon as possible and start spinning those wheels.

The fundamentals of the drive phase will translate to block starts in track. The drive phase starts at velocity zero.

The bullet points of the drive phase:

- Push with the front foot, pull the back foot, dragging the toe
- Imagine the feet pushing the hips forward
- The feet stay behind the hips, the hips stay behind the shoulders (triple extension)
- Ground contact times are much longer in the ground phase (Ben Johnson, when he ran 9.83 in Seoul, had average ground contact time of 0.115 in the first 10 meters, 0.80 at top speed after 40 meters)

Verbal cues of the drive phase:

"Push & Pull"

"Drag Your Toe"

"See the Track"

"Big & Strong"

"Don't Spin Your Wheels"

"Split & Rip"

"Push Push Push"

"Run in a Lane Inside of a Lane"

"Fewest Steps Wins"

Many athletes will try to stay in the drive phase too long. Their body is upright but they keep their chin down trying to see the track. The drive phase is over when the shoulders are on top of the hips. You can't extend your drive phase by running tall and looking down at the track. Silly. If your drive phase is over after five steps, get tall and sprint.

The drive phase may last between 5 and 35m based on the skill and speed of the runner. A little kid may have a two step drive phase. World class sprinters may not "get tall" until they are over 30 meters into their 100 meter dash. 30 meters is 33 yards. I've never coached a high school sprinter who could maintain a drive phase for 30 meters. Sorry for mixing yards and meters here.

The super-simplified boiled-down bullet points of Max Speed:

- Get tall ... 5'10" sprinters look like they are 6'0? when at max speed
- Legs ... "get big in the front, short in the back"
- Arms ... "hands must cross the hips" ... must see lots of day light between butt and back hand

- Think "big & strong", not short & quick ... don't spin your wheels
- Bounce off the ground ... never "grab the track and throw it behind you"

Sprinting and jumping are like electricity and magnetism. One creates the other. Sprinting improves jumping, jumping improves sprinting. (For those of you who are not scientists ... electricity can make a magnet and a magnet can make electricity).

I train "bounce" with plyometrics. I've always defined plyometrics as "landing and jumping at the same time" ... bounce. Remember, a sprinter bounces off the track. Ground contact times need to be almost non-existent.

Do low volume, high intensity plyometrics year-round. Get as high as possible and BOUNCE off the ground, working on ground contact time. Do single-leg box jumps. Also bound consistently.

2. Record, Rank, and Publish

"If want to improve something, you begin by measuring it." Then you record it, rank it, and publish it. Sprinters will not truly sprint unless they are being timed.

Quantified speed is the key to sprint training. #SpeedKills

Improvement excites the athlete.

3. Consistency

Sprint training should never happen more than three or four days per week. Sprinters need to play multiple sports.

Most sprinters train at least half the year, but consistency means much more than that. SPRINT every time you train. We measure speed as a part of our training program. Quantification is not just diagnostic ... it is motivational.

NEVER RUN SLOW. That's why it's important to rest between sets so that when you start the next set you can run FAST. **NEVER RUN SLOW.**

Speed grows like a tree ... so plant early and train often.

"Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent

Practice proper mechanics, train at top speed and stick with it.

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