

FRIDAY, APRIL 14, 2006

Speed Coach of the Year

I had mentioned previously that co-founder of Athletes' Acceleration and Performance Consultant, Latif Thomas, had received the Massachusetts State Track Coach of the Year Award this year. As you know it is a tremendous honor to be nominated by your peers in any sport you coach. I know personally what an amazing coach Latif is and of all the team and individual success his athletes have had, but it's not only about the awards his athletes receive. Coaching at the high school level, he has changed so many lives by developing these young athletes physically but more important, mentally.

I talk with Latif all the time about training theory and application and we have some great discussions, almost daily. I guess because of these frequent talks, it is why I haven't even thought to do an interview with Latif for our list members (I know, not a very good excuse).

So for all of you that have emailed me in the past 2 weeks that have been begging to know the thoughts, strategies, and programs that Massachusetts State Coach of the Year Latif Thomas uses, first, my bad, and I am sorry for not doing this earlier and second, I made Latif sit down over the weekend to answer all of the question that you have sent me for him these last 2 weeks.

So here you go:

Patrick: What coaches have influenced you throughout your coaching career?

Latif: I've been influenced by a wide variety of coaches over the years. I've come to know that coaching is both an art and a science, so being an effective coach isn't always about knowing when to run a particular workout. For example, one of the biggest influences on me was one of my high school coaches, Jason Gittle. He wasn't the most knowledgeable coach when it came to the science of coaching, but he was a genuinely nice guy. His personality and interest in me as a person made me look forward to going to practice just so I could hang out with him. He was good for a few belly laughs every practice. He helped me through some very tough times on and off the track and so I tried to learn from his coaching style. That's one of the reasons for our athletes' success. Instead of talking at the kids, I talk to them. Building that rapport and trust helps athletes buy into the system that we're running. When they believe in what they're doing, they're going to get their best results.

When it comes to the practical aspects and science of coaching, I've studied a lot of great coaches. My system is heavily influenced by my coaching mentor, Kevin Murphy, an

outstanding coach and person who was inducted into the MSTCA Hall of Fame this year. He got me started in coaching and put me on the path to learning proven training methods instead of simply regurgitating what I thought I knew based on my athletic experience. Another influence was Mike Scanlon, another Hall of Famer, whose teams won something like 7 All State Championships in a row out of the smallest division in the state. He is one of the few coaches I have come into contact with who was willing to lay all his coaching knowledge out on the table. He didn't guard or protect his secrets, whether they were about how to train athletes or how to deal with kids, parents, etc. I learned an immeasurable amount of information from those guys over the years.

I come from a track background so my belief, in large part, is that if you want to teach athletes how to run fast then you should study the fastest people in the world: track sprinters. One of the first 'famous' coaches I began studying is the famed Canadian coach Charlie Francis. His philosophy on General Prep training has a heavy influence on my programs and he was one of the first people I heard talk about eliminating middle intensity work, something that most programs and coaches use almost exclusively.

Who I study really depends on the type of speed I want to learn about. But my list of people you should really learn the philosophies of is Charlie Francis, John Smith, Clyde Hart, Mike Boyle, Barry Ross and Tudor Bompa. Actually I could keep going and even write in detail what I think of each person's theories, but for now just start looking into what these guys have to say.

Patrick: What are a few common myths that coaches still believe in regarding speed development?

Latif: Man, where do I start with this one. Even in the information age that we live in, it's amazing to see how many coaches don't bother learning or doing anything different than what they did when they were young. Sometimes it borders on physically painful when I watch the crap that athletes are still being taught. But I'll just list a few of the biggies:

1. You can't teach speed. This is just crazy. When I hear people say that I always ask, 'Oh yeah, then why do Olympic Sprinters and NFL receivers have speed coaches?' It's because they know they can get faster! I can't turn everyone into Carl Lewis, but every athlete can get faster. Some parents, coaches and athletes resist this at first, but I've just proven it so many times that it's hard to argue against. In fact dispelling this myth is one of the many reasons we created Complete Speed Training in the first place.

2. To run faster you have to train harder. This is just an old school mentality that you still see being used in certain sports and by certain coaches. I could give Justin Gatlin or Reggie Bush a workout they can't finish, but what does that prove? A given workout is supposed to provide enough of a stimulus to foster an adaptation. Purposely running an athlete into the ground doesn't make them better. There is a point of diminishing returns when it comes to training. Our job as coaches is to be able to recognize when an athlete is reaching that point and stop them before they get there. Remember, train smarter not harder.

3. Drive your knees to run faster. Well this one is actually not a myth but a fact. The problem is that coaches do it backwards. Too many coaches are telling athletes to lift the knees when they should be driving the thigh down, applying more force to the ground. I was taught to run by lifting my knees and the result was countless injuries and frustration due to terrible mechanical issues. If someone had just told me that the key to speed is to 'step over the opposite knee and drive down' instead of 'knees, knees lift your knees' I'd have a lot more trophies on my wall. The benefits to this one change are truly overwhelming. If you can teach your athletes to apply this concept it will really change your whole program. That's why I spend so much time teaching and reinforcing the benefits of training athletes to run this way both in real life and in our speed programs. If you teach your athletes nothing else, teach them 'step over, drive down' and all that comes with it.

Patrick: Do you see a common trait that today's athletes are lacking?

Latif: We all know there is an obesity epidemic in this country. But there is also a laziness epidemic. In large part I'm sure it is due to the amount of time kids spend in front of the computer or playing video games. Either way, the result is an overwhelming lack of general work capacity.

Put simply, athletes are generally weak (I'm talking both pure physical strength as well as core strength), generally soft and generally out of shape. I've found that athletes have a difficult time doing the most basic core exercises, lack the flexibility to achieve proper range of motion and just get tired and sore very quickly from easy aerobic capacity workouts.

Let me give an example. I coach a boys and girls high school track team. When I get them the Monday after Thanksgiving I put them through a week of general conditioning to see where people are at. It doesn't matter what sport they did in the fall, when they get to practice the workouts are shameful.

I am a huge proponent of circuit training. I'll set up usually 10 exercises broken up between legs, core, arms, etc. Athletes do an exercise and then run 40 meters at about half speed to the next station. A couple times through these circuits and you'd think it was boot camp.

Kids are cramping up, cheating and generally complaining. It's not because the workouts are tough, it simply because they're out of shape. And being out of shape is more than just their lack of cardiovascular conditioning. They lack the core (abs, hips, glutes, lower back) strength required to stabilize their upper bodies when running, they lack the brute strength (in this case leg strength) to propel their bodies down the track or runway and they lack the mental strength to push through the workout when they are tired. And this isn't just with track kids. I get the same lack of work capacity with everyone from football players to soccer, field hockey and tennis players too.

More importantly, by the mid point of the season, these same athletes who were bailing out of easy conditioning workouts are begging me 'Latif can we do circuits today?' Once their weaknesses are made strengths and we've build a foundation to shoulder the load for legitimate training and improved performances, these types of workouts are no longer as challenging. On a scale of 1-10 these workouts should be a 5, not an 8 or 9.

Patrick: What is your approach to improving conditioning levels for speed and power athletes?

Latif: Speed and power sports, that is, sports that consist primarily of an anaerobic demand should be trained by looking at the actual demands of the sport itself. Does a football player or a 100 or 200 meter runner ever run slowly for an extended period of time during a football game or a track meet? Then there is no need for long slow intervals or going for runs out on the roads. Yet I know of coaches who train athletes this way and it's only making these athletes slower. If you coach another speed/power sport such as baseball, softball, volleyball, basketball, etc. you have to ask if the conditioning work is specific to the sport.

Even sports like soccer and field hockey go overboard with the slow conditioning work. I've seen plenty of both sports and I see athletes accelerating hard for 10-20 yards, then slowing down, then accelerating, then a run then a sprint. So if there is all this speed up, slow down why are coaches doing a lot of mileage and long slow intervals and neglecting the acceleration development?

I digress. Generally speaking I think aerobic work should be done more as active recovery and less as a form of conditioning.

In large part, like I mentioned before, I love bodyweight circuits. They improve overall aerobic capacity, core and general strength, coordination, flexibility and aid in recovery. They serve multiple purposes and can be done in a very short period of time. Plus, it detracts from the pounding on the legs that running interval workouts all the time creates. You can simply change which exercises you use, the order and where in the circuit you use them in order to make it harder or easier.

For example sometimes I'll do a circuit workout using all core exercises. Other times I might go heavy on the leg exercises to really challenge kids' mental toughness. Other times I'll put in a lot of flexibility exercises if I really just want to loosen the kids up on an easy day. Like I said before, you have to look at the demands of the sport and the overall picture. If I'm going to do a lot of cutting and change of direction drills tomorrow or even a tough speed endurance workout, I'm not going to trash their legs today.

At the same time I'm also a huge proponent of tempo running. For clarification, I call tempo runs any runs for a particular distance that are between 65-80% intensity. The way I see it, most sports involve running so athletes do need to get out and run. It's a good way to loosen up and accomplish the aerobic capacity and recovery needs of speed and power athletes.

I just don't think the volume needs to be extremely high. But again it depends on the sport. A football player or 100 meter runner doesn't really need to go over 1000m in total volume for a tempo workout. But a soccer player better. Again, look at the sport.

Sometimes I'll have athletes do their tempo work as part of their warmup to get it out of the way so I can work on other things. For example I'll have them do 10x100 meters at 75% with 30-45 seconds rest, depending on their conditioning level or run from endzone to endzone and then walk the width of the field for recovery. This is a great solution for non-track coaches who have a great deal of sport specific skills to teach every day.

Patrick: Do your track and field athletes train differently then the other athletes (court & field sports) that you train?

Latif: I guess the primary difference here is that non-track athletes don't do nearly the volume of starting/stopping, change of direction and agility work as court/field sport athletes. Since track is mostly linear, we do some of that agility work during the preseason as stabilization work, coordination and body awareness development and general work capacity.

However, from the standpoint of developing flexibility, core stability, strength and power development, mechanics, acceleration and overall speed development, etc. all the athletes follow the same general plan, keeping in mind the specific demands of each particular sport.

What I mean is, if a running back and a sprinter have weak cores, then they have weak cores. The way to solve that problem doesn't have to change because they play different sports. I know that kids can't see the almost universal carry of movement and demands between sports, but as coaches we need to be able to see those commonalities.

Again, slow is slow, weak is weak, uncoordinated is uncoordinated, regardless of the sport they play. Almost every athlete has the same fundamental problems holding them back.

Each specific issue must be addressed for what it is, not necessarily what sport they play. Let's not reinvent the wheel here.

Patrick: In general, how many days per week should athletes train speed?

Latif: Generally I would say three days per week, one of those days being a competition. If the training is being done properly and athletes are doing the right amount of volume with sufficient rest, then three days should be more than enough to learn how to run as fast as possible while also getting enough recovery to ensure supercompensation.

If relatively inexperienced athletes start training speed more often than that, you're likely going to start seeing overuse injuries like tendonitis and increased occurrence of cramps, strains and pulls. If you're seeing these types of issues every season or you're finding that athletes are fading towards the end of the season then you are likely overtraining them and need to make an adjustment somewhere.

Patrick: There are many different opinions on weight training for speed and power athletes. Where do you stand on the topic?

Latif: We have a bodybuilder mentality in this country even as it applies to weight training for sports. I understand that certain young athletes and athletes of certain sports (like football) need some hypertrophe work in the early part of their training. The problem I have is when performance specific training includes bicep and hamstring curls and excessive use of machines.

I am from the camp that says strength training should involve multi joint movements using, for the most part, heavy weights in the 2-6 rep range. Just as important, athletes need full recovery between sets of lifts as they would between reps of speed intervals. That means resting at least three minutes between each and every set.

Our legs get us where we want to go so strengthening our legs is paramount. My programs, regardless of sport, revolve around the clean, squat and deadlift. Ultimately, you don't really need to do more than those three lifts.

Upper body strength training doesn't need to be done to the extent it is done by athletes in this country. For example, how much value is there in a sprinter spending time developing a big upper body? Very little. The fundamental goal is to gain the strength required to succeed in your particular sport. Any unnecessary gains in muscle mass (and therefore bodyweight) only stand to slow an athlete down. How? As I said before, speed gains come from applying greater force to the ground. The heavier I am, the harder it will be to move by body mass in any direction. But if I gain strength without gaining a bunch of weight it will make it that much easier to move quickly and easily.

Patrick: Do your endurance athletes train differently when it comes to weight training?

Latif: No. All things being equal, my endurance athletes do the same weight training workout as my speed power athletes. At first this was a form of sacrilege to my endurance runners, but once I explained to them why it would work, they couldn't argue against it. Again, especially with them, the goal is to make significant increases in their ability to deliver mass specific force to the ground, but without increases in body mass.

It takes a little longer for them to get the techniques down because heavy weight training is such a foreign concept to them, but once they start seeing results, they're hooked.

There are two great articles on the topic of force application that weigh heavily in my personal philosophies on speed and strength training. Both appeared in the Journal of Applied Physiology.

They are 'Faster top running speeds are achieved with greater ground forces not more rapid leg movement' by Peter Weyend and also 'Explosive-strength training improves 5-km running time by improving running economy and muscle power' by Leena Paavolainen. I strongly suggest you check out both articles.

Patrick: Do you use speed work with your distance runners?

Latif: I most certainly do speed work with distance runners. I'll teach them traditional (as I call it) acceleration development over 30-50 meters so they learn to get up on the balls of their feet and apply force to the ground. So many distance runners are so used to running slowly all the time that getting them to sprint is like sensory overload. How many distance races have you seen that came down to a 'kick'? Well the athlete who does speed work is going to win that race everytime.

How often do you see an athlete surge in a race? Instead of just running, say, 70 seconds for each 400 over and over, they all of a sudden drop a 66, then later a 65. Plodders, athletes who train for pace only, can't make a move like that and are instantly out of the race.

Teach your distance runners how to sprint and you open up an entire realm of possibilities for them. This was a topic of discussion on our track site, CompleteTrackandField.com and someone raised the point that to be a good 3K runner, you need to have 1500m speed. To run a great 1500, you have to have 800m speed. To be a great 800m runner, you need to have 400m speed. You get the picture. Train slow to run slow.

Patrick: What might be a sample preseason routine for conditioning for the 100m or 200m event?

Latif: I'll give you a preseason 'conditioning' day, then a preseason speed workout so you get the idea. This is for an athlete with a training age of 3 or 4, so a high school aged athlete.

Recover/Conditioning Day

Dynamic Warm Up (no speed drills) - should take about 20 minutes

Tempo Workout: 1 = 100m, 2 = 200m, + = walk half the distance of the previous rep. Intensity is at 75%.

1 + 1 + 1 + 2 + 1 + 1

walk 200 meters

2 + 1 + 2 + 1 + 1 + 1

or Circuit Workout: run 40 meters at half speed between exercises

Prisoner Squats x 25

Pushups x 20

Bicycles x 30

Lateral Lunge x10 (each leg)

Up and Back x20 (each leg)

Toe Touches x 25

Split Squat x15 (each leg)

Fire hydrants x20 (each leg)

Superman x25

Burpees x12

Rest 3 - 4 minutes

Repeat the circuit

Hurdle Mobility:

4 drills over 6 hurdles

Go through each drill twice with each leg

Core work - stabilization exercises - 60 second holds

Or

Medicine Ball Core Work

Warm Down Jog

Rope Stretch

PRESEASON SPEED SESSION

400m jog/400m skip

Full Dynamic Warm Up - 20 minutes

Speed Drill Practice - 10-15 minutes

(A March, A Skip, A Run, A Run to Acceleration, Fast Leg)

Speed Work - Short Hills - On grass

8-10x 30m sprints up hill (focus is on force application)

3' active rest between reps

Double Leg Hops over 12' Banana Hurdles (focus is on stabilization)

4 sets of 6 hurdles forward

4 sets of 6 hurdles lateral

Weight Room

Patrick: What does a typical structured speed day practice look like for your sprinters?

Latif: For the same athlete I used in the previous example. This is a competition phase speed session for a 100/200 runner.

Jog 400m/Skip 400m

Full Dynamic Warmup - 20-25 minutes

4 x 40m accelerations at 80%, 85%, 95%, 95%

Starts: 5 x 40m on the turn (should take about 5-6 seconds, the amount of time athletes should go at 100% intensity before beginning to float)

3-4 minutes rest between starts

3 x fly 40m with a 20m buildup and 25m deceleration zone

5-6 minutes rest between reps

5-10 minute cool down

1x10 each leg - front and lateral leg swings, iron cross, scorpions

Weight room and Plyos

Patrick: Should girls train differently than boys when it comes to speed development?

Latif: Psychologically, training girls and training boys is like two complete different jobs. But that is a whole other conversation in and of itself.

I train girls and boys almost exactly the same. Girls are just as capable of performing the same tough workouts as boys. The only differences I would make are in doing plyos and change of direction movements. There is an ACL epidemic with girls in this country so specific time and effort must be spent working on movements that will strengthen those areas and reduce the likelihood of injury.

Patrick: Do you see any trends or feel the direction speed coaching industry is heading?

Latif: The trend I see in the industry is what I'll call a trend toward minimalism. This is along the lines of what I have been saying all along here. That is, a greater focus on quality over quantity. In the weight room it means doing less reps but with more weight and longer recovery. It means eliminating some of the supplemental lifts like hamstring curls and military press if they don't directly assist an athlete in the event/s they compete in.

On the track it means more quality work at a lower volume and, again, with full recovery. It also means less long slow intervals and less aerobic conditioning. Why train energy systems that aren't being used?

I think as we move into the future, especially in track and field, we'll see less athletes looking like bodybuilders and these athletes will be more fine tuned to get the most out of their bodies. Instead of following the status quo, coaches and athletes will look objectively at what makes the most sense for that particular athlete in that particular sport or event.

In many ways it is what we set up in Complete Speed Training (www.CompleteSpeedTraining.com) and even Football Speed (www.FootballSpeed.com).

The goal was to give coaches the answers to questions that would provide them the opportunity, instruction and guidance to implement techniques and strategies that wouldn't take forever to teach or learn. Instead it specifically gives the workouts, drills, exercises, etc that have proven themselves to work over and over again with athletes of every sport, age and skill level. The success my athletes have had under this system has truly allowed them to dominate the competition. It's been great to see them succeed but also for other coaches to realize how much potential for improvement their athletes and teams actually can make.

Learn more about Latif's proven system for developing speed in every athlete and sport by clicking here:

<http://www.completespeedtraining.com>