WESLEYAN UNIVERSITY STRENGTH & CONDITIONING

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Developing Speed- Speed Training Tips

Speed development and enhancement is a careful balance and combination of strength training, sport training, skill training, and speed training. Limitations in any of these areas can hinder the athlete's ability to improve their speed.

Strength Training-Lower Body & Olympic Style Lifts

First, let's look at strength training or resistance training. Leg strength and core strength are essential for speed. Maximal strength and acceleration ability are closely related. Resistance training develops specific strength and improves acceleration. When in the weight room following a structured strength program you must spend the quality time on squats (Front & Back), lunges, Olympic movements and variations (Clean, High Pulls, Push Jerk, Split Jerk, Snatch & combination lifts). Starting is about extending the ankle, knee, and hip. This is referred to as "Triple Extension". This movement occurs in many sport movements (jumping, throwing, taking down an opponent, swinging, track & swimming starts, etc..) Once again, this can be trained explosively in the weight room and strength program. Stopping/decelerating involves bending the ankle, knee, & hip. This too is a component trained in the weight room.

Core Training & Functional Training

In addition to the essential lower body lifts involving the ankle, knee, and hip, the core is an essential piece to enhance speed. The trunk or "Core" is a pillar which must be strong and stabilized so forces generated from the legs into the ground, from the ground back up through the legs may pass through the core. These forces will then be passed through the limbs for more speed, power, and sprint mechanics. Athletic movement is a chain of linked events as opposed to isolation. This is why a strength program for an athlete should focus on "Functional Training". What is functional training? Function is purpose so functional training is purposeful training and is literally training muscles based on their function. When you analyze most sport events or activities, are they played upright or seated? How many of these activities are performed one joint acting in isolation? Single joint movements that isolate a specific muscle are very non-functional. Athletics is about the integration of muscle groups into movement patterns. This is what you call "functional". I mentioned earlier about the "Triple Extension". This is training for movement not isolation.

Practical Tips for Speed Training

- **B**efore beginning your speed session, always get a good warm-up in. This means raise your body temperature and get a good sweat going on the forehead. Warm-up means move your body. Try not to sit down & stretch, but rather incorporate "Dynamic Stretches/movement stretches along with athletic body movements (See warm-up ideas on training plans).

- **S**peed work demands a lot of motivation. Another great reason to get warmed up so you feel like getting after the training session.

- **B**e intense, less is more. Remember you are training speed, it is not a "Cardio" run.

- **E**liminate or at least minimize distance running. Slow, aerobic, distance work will reduce your explosiveness and hinder strength gains. Sport is about speed, change of direction, and speed endurance. Shorter intense work and interval training are better ways of training. Use anaerobic training to get aerobic benefits. Condition for your sport by playing your sport. If not, try to mimic your sport through interval type training.

- **S**peed development should be performed when the body is rested or in a non-fatigued state. Just like in the weight room where speed/power lifts should be performed first, perform speed training at the beginning of a workout, and then work on speed-endurance.

- **M**aximum speed is an optimal combination of stride length and stride frequency. Do not develop one to the exclusion of the other.

- **S**peed is a motor task so you can learn to run faster by focusing on proper mechanics.

- "**A**rms drive the legs." Arms are essential in sprinting. When accelerating, the arms help you drive the legs to develop more force into the ground to explode. When reaching maximal speed, the arms are there for balance and tempo.
- **V**ary speed training methods and intensity to avoid building a speed barrier. This again, is similar to strength training. Repetitions, weight loads, rest periods are all variables that change in a program to avoid strength plateaus or digression in strength. Do the same for your training plans.

Ideas developed from Vern Gambetta, President of Gambetta Sports Training Systems in Sarasota, Fl.