

High Jump and training the CNS

First off, how many think practice makes perfect.....unfortunately in the high jump that isn't very true. The more you jump the more you tax your body and more importantly the CNS. Two steps forward three steps back. I see it happening in about 96% of high school programs. That's not to say don't practice. I am saying strategize your practices and work outs. Understand the high jump takes years to perfect. You can't do it in 3 weeks. Too many variables. Going into the championship meet either state or nationals your goal should be to do what you have done before or maybe if everything works out right pr. You will not go to the meet and pr by 6 inches by jumping your butt off working on the new style of jumping you just learned from the local college kid. It doesn't work that way. Not saying it never will but the odds are against you.

Speaking of PR (personal record), I try to achieve 2 maybe 3 PR a year. The way the seasons are you have to train and give your self breaks. You can't train hard all the way through the season. You will end up with injury and burn out. So, I amp up for a few weeks and week off...Usually this is the PR week. Then do it all over again. Very systematic. You need to have a great game plan on paper. I will give examples of how a typical season should go. Keep in mind the high school season is loaded with track meets. Use the week day dual or tri meet as a training day. Schedule your weight training sessions on days you either have a dual or early in the week along with speed training. Also keep in mind that your training schedule should be adjusted to the athlete. Some require more rest than others. If they are feeling flat or no pop in their step, change your weight or sprint work out for the next day. Listen to your athletes body.

A little insight on how the CNS (central nervous system) works with a jumper. The CNS sends the signal from the brain to the muscle. Brain says jump, you then jump. The speed that signal is sent is from one part and back is what we are concerned with. CNS fatigue occurs when your body has had enough of a work out. You can tell this by a few different ways. Does your athlete look sluggish? Does your athlete feel sluggish? Is foot contact while running or doing plyometric excersizes longer than normal? **SOME STUDIES SHOW YOU NEED AT LEAST 48 HOURS OF REST BEFORE YOUR NEXT CNS WORK OUT.** Most programs aren't built around rest. I feel rest is the most important part of the work out.

While designing your work outs work backwards. Find the date of the goal and work from that point. Lets start with a simple random week in the season just to make this a bit easier.

Monday-Sprint work out/Weight training/block work

Tuesday-Easy day. Tempo runs and approaches. Nothing to 100 percent.

*Wednesday-Dual meet/Weight training

Thursday-Easy day. Nothing to 100 percent. Hand offs/drills/approaches

Friday- Easy day, approaches, 50/50/50 (50m walk, 50 m jog, 50m sprint) do not go to max only about 85% with sprint.

*Saturday- Invitational or big meet (goal day)

Sunday-Off or complete rest.

This is a ideal week. It isn't always this easy to plan. But this is the goal. Notice the minimum 48 hours rest before taxing days. This is very important.

Examples of work outs on days designed to be taxing. Keep in mind this work out idea is for a athlete with a bit of experience and not for a beginner. Teach the beginner or have them tag along.

Warm up, I use a dynamic warm up. Practice 6 or 8 or 10 step jump. 8x30m(40m or 50m) block starts 3 to 6 min rest. Weight training, Squats, cleans, snatches, bench, 1/4 squat, jump squat all with full rest. This can all be done on the same day because it all is taxing and geared toward fast twitch muscle fiber development.

The next day or next 2 days depending on rest requirement needs to have excersises or drill that are designed not to tax the body or CNS. Keep in mind the goal is fast twitch muscle development.

Going back to the begining of the season. Start with lighter weight training. More general. Still do your Olympic lifts but reps and sets like 3x10, 3x8 or 4x6. As the season goes on taper to the point were you are at 3x2 or 3x3 or 4x3 with heavy weights. Going to the point where you may be at 1 rep with 90 to 100% max. This should only take about 5 to 6 weeks per phase. After you get to the end of the first or second phase depending on if you trained for indoors take a week off of weight training and start over. This is very important.

Train through your dual or mid week meets. Never the day before or the day after. You need rest.

Never jump two days in a row.

Never jump the day after a taxing work out. REST

More rest is better than less rest.

Keep in mind if you have a quality jumper that will jump in the state meet, the last week of training before the meet should be very minimal. You won't teach a jumper something new to make them improve. It is what it is. IF you had a good game plan going into the meet they will do great....only if they don't have a mental break down and that you can't contral.

Examples of things i have done.

*walked off the track at district and regional meets and went straight to the weight room. It was the only way to keep the 48 hour CNS minimum.

*4 days of easy training before the state meet with no jumping.

*had athletes go home after school instead of practice to ensure adequate rest.

Yes this may sound extreme and a little "out of the box" but it needs to happen. Get out of the mind set that more work is better.

Have a good game plan and stick to it. Listen to your athletes body.