

High Jump

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Assessment talent/attributes for the High Jump

Note-Before you can assess the athlete for the High Jump you must find them. I feel that every school has the potential elite athlete. As a coach you must go out and find them. I'm always on the lookout for the athlete that catches my eye. You must go out and recruit. Be aggressive don't make the mistake that they will come to you. How many kids really know about the High Jump? Think about the old saying. Seek and you shall find. I use this old saying quite often. It will motivate you to get the athletes and the information you need to help your athlete.

Places to find High Jumpers

1. Basketball Gym
2. Athletic Fields
3. Hall ways.

Remember there are a lot of basketball players that just don't have the skill level to make the team. They will hang around the gym and waste their talent. Go recruit them! You next champion might be one of those kids. At Cinco Ranch we do what's best for our kids and steer them in the right direction.

This is what I'm looking for when recruiting High Jumpers

Assessment of talent

1. *Ectomorph body type-the lean and lanky athlete has an advantage over the heavier athlete do to the force it requires achieve vertical lift.*
2. *Height-The taller athlete has the advantage because the difficulty increases as one jump above their head.*
3. *Speed- is a requirement to apply force into the ground. Speed is a requirement for muscle contraction. It also reflects strength.*
4. *Flexibility-is important because it reflection of speed and muscle contraction. The flexible athlete has the ability to apply force into the ground.*
5. *Coordination-the coordinated athlete will have an easier time learning the event. Repeated drills can achieve the desired movements.*

Attributes

Here are some other attributes I look for when choosing my athletes.

1. *Intelligence-the athlete must acquire the knowledge of their event. They must have the ability to recognize situations that will give them the opportunities to succeed. They must realize why we do certain things and why this and that is important.*
2. *Desire-The athlete must have desire to reach their full potential. They must reach their full potential as an athlete and a person.*

3. *Work ethic-The athlete must have character to do what is necessary to become a champion.*

Note:

Don't assume anything about the athlete's ability. Appearances can be deceiving. The frail athlete might be what we called "Being Wired Right" which is having all the necessary components to become the elite athlete. It is up to the coach to bring this talent out.

Warm up routine/s

Note:

As a coach you must adapt you warm-up routine to your own situation.

Our Warm-up

Our team does a general warm up as soon as they get to the track. It is integration of many body movements that achieve several things at once. We work on posture-conditioning-strength-flexibility-coordination. We do different drills at certain points on the track.

Drills-Forward jog-Forward lunge-forward skip-lateral lunge-side to side shuffle (high)-bear crawl-A skips-Kenyan jog-lateral shuffles side to side (low)-backward run (heel up)-carioca-lunge slides-toe touches-zombies-jog

Our second part of our warm up is called Movement Prep

Movement Prep is an activation of the core area. It activates the muscles in the core area allowing a greater development in the training adaptation.

1. *Hip Cross over (bent knees-stretch)*
2. *Scorpion*
3. *calf stretch/ Achilles stretch*
4. *lateral lunge*
5. *backward lunge with a twist*
6. *inch worm*
7. *drop lunge*
8. *forearm lunge / with a split*
9. *sumo stretch*

Then we begin our dynamic flexibility routine-we vary our routine depending on the workout.

Various dynamic stretches-usually 5 cycles of 5 different exercises scorpion-sissors (frontal-sagittal)-hip circles-leg swings-(frontal sagittal)-figure 8s-hurdle seated (with sit up)-inverted bicycle-hurdle seat exchange-lunge exchange-head rolls-arm circles-wrist circles-knee circles-leg circles-ankle circles-hip circles

Specific Warm-up

High Jump

1. *High knees*

2. *Straight legs*
3. *Butt kicks*
4. *bounding*
5. *power skips (with double arm punch)*
6. *ankle rotations*
7. *Back arch*

Meet warm up

1. *mach drill 3 step*
2. *bar arch drill*
3. *pop up*
4. *scissors*
5. *short approach*
6. *full approach*

Technique Flosbury Flop

The ability to bring more horizontal velocity while lowering your center of gravity.

Technical objectives

1. *Controlled horizontal velocity*
2. *Lowering the center of gravity(back & away)*
3. *Takeoff-conversion of horizontal velocity to vertical height (the raising of the COG)*
4. *angle of take off*
5. *posture over the bar*
6. *clearance*

Phases in the High Jump

1. *Start*
2. *Pushing out of the back 3 steps*
3. *upright phase*
4. *Transition 5th to 6th step*
5. *Curve*
6. *penultimate*
7. *takeoff*
8. *rotation*
9. *clearance*
10. *landing*

The Approach is the most important aspect of the high jump. The approach is the most important aspect of all jumping events. You must set up the take-off with the approach.

It must be a controlled consistent run. The athlete must develop a rhythm so when the bar is raised and the takeoff is moved out the athlete will be in control and not vary their steps or speed. Controlled consistency is the key. It is good advice to time the athlete on their approach to insure consistency. A consistent run will give the athlete a

chance to duplicate a performance that has been rehearsed. Do not change the speed of the run just because the bar is at a higher height.

Steps for the Approach

- 1. Have your athlete run 10 strides on the track in a straight line. Have them do it several times. Timing them would be good to keep the speed on the run consistent.*
- 2. Measure the average of the 10th step.*
- 3. Divide the distance in half and you should have the point at which the curve begins in the approach.*
- 4. The total distance will be at the point of takeoff.*

How wide is the Approach?

The width will be determined by the strength of the athlete and the velocity they bring to the takeoff. The goal of the coach is to get the fastest curve that the athlete can handle. I feel that the tighter the curve will cause the COG to lower even more. However the tightness of the curve makes the takeoff more difficult.

How to get the width of the curve?

Put the inside hand to the cross bar and walk 5 regular strides from takeoff mark and get a generic mark until it is perfected.

Start-Rock & Go

Steps 1-3

Some jumpers do an elaborate rock & go but I think it breaks concentration and uses too much time.

Begin with takeoff foot underneath the knee. The first here steps are to increase velocity and to get you moving forward. Keep body lean and accelerate in a build up fashion.

Upright Position

Steps 3-6

The jumper needs to run in an upright position with the hips under the COG. The heel must be tucked under neat the buttocks in a cycling action with the toe up.

Transition

Steps 5-6

The fifth step will be the foot on the outside of the curve. The 6th step will be placed in alignment with the 5th step slightly across the body. You begin the curve with the 6th step.

Curve

Steps 6-8

The curve will be initiated by the 6th step by pressing on the outside edge of the foot. Tempo is increased and by pushing on the outside edge of the foot an inward lean will develop. There must be a straight line from the head to the foot to run the curve correctly. You want to speed up in the curve.

Penultimate

Step 9

Coming off the 8th step (left foot) you lower hips (COG) in a heel to toe fashion with the right foot. You sprint off the right foot in a pulling action and then apply as much as possible force off the right foot forward. The takeoff foot will extend out in front and at this moment you must pull it down in a popping action to apply more force to the ground.

Takeoff

The takeoff foot extends out in front of the COG. The toe of the takeoff foot must be pointing towards the back corner of the mat. The foot action is heel to toe. Think about putting as much force as possible in to takeoff foot. A fast right leg will aide in this. Fast high & tight is what I tell my athletes. The athlete must apply force as long as possible into the ground. They must have their shoulders back and the hips out in front with the inside shoulder away from the bar. Again there should be a straight line from takeoff foot to the athletes head to have the correct posture. Any breaks in posture will be sacrificed in height. Sprinting off the right and bring the arms forward in a punching action will increase the force being applied.

The outside leg comes up as high and fast as possible in an up & out position to open up the hips into the rotation onto the back.

Rotation

The outside leg comes up as high and fast as possible in an up & out position to open up the hips into the rotation onto the back. The lead leg will pull into the rotation. The shoulders initiate the rotation onto your back. The outside shoulder is turned down and away from the bar while the inside shoulder is coming up due to the punching action. The outside hand will come up through the middle of the face into the block slightly above the head. The inside hand will come up to about chin high and then lower to hip level.

With the extension of the lead leg it will give enough time for the takeoff leg to catch up in a parallel position as the shoulders pass over the bar.

Clearance

Once over the bar extend the hips up and drop the head straight back. Once the hips are over brings chin into chest and arms up. This will cause the lower body to rotate up.

Landing

You must land on the upper part of the shoulders with the feet behind the head.

Drills

Note: I believe drill should be taught sequential so that the athlete can master each step to master the full approach and jump.

Approach Drills

- 1. Start-Rock & Go***
- 2. Start to Upright position***
- 3. Start to Transition***
- 4. Curve drills***
Circle drill-figure 8s-serpentine runs
- 5. Gallop drill-Dapena hurdle drill-med ball behind the back***

6. *mach drill-continuous penultimate-pop up-out of the curve into the pop up-scissors*
7. *Knee up drill-knee up with extension-Tennis ball shoulder drill*
8. *Arch drill-box drill-Arkansas Box Drill-Ramp jumps-v-mat off drill*

Training

Variation of training will allow adaptation to occur faster. We want to get the most out of our training. Mix it up and the kids focus will develop. It also makes things more fun and exciting.

I feel that a high jumper must be trained in a manner that is similar to the sprinter. So the high jumper's training will be similar to the sprinter with various differences in bounding and certain lifts. I feel that if an athlete can jump 7-0 feet they are wired to do other events.

We work on the core portion of the body a lot in our program. The core is the base of the strength of the body so we get strong there first. Doing core exercises also gets the kids in shape and will keep their posture integrity good. Posture is a must when becoming an elite athlete. We begin our training working on cardio vascular and using strength circuits in the early stages of our off season.

Basic core exercises-usually 1 set of 15-20 reps

Sit ups-Posture must be done correctly. Up then down slow.

Superman-Back extensions up then down slow.

Bear Craw-Strengthens lower back.

V-ups

Sit up with twist

Superman with a twist

Scorpion

Heel raises

Table drill

Clap push ups

Spider hops

Spider crawl

Opposite hand & foot push up & hold

Hip flexor circles

Fire hydrant

All four trail leg

Gut busters

Movement Prep-the activating the core areas of the body

Hurdle mobility-we work on the hips when doing hurdle mobility. We like to have hands above the head to get into correct posture. Knees are brought as high as possible to allow the development of the hip flexors and the glutes.

1. *Walkovers*
2. *Over and under*
3. *Dip & through*

4. *Skips A-Skip& B-Skip*
5. *Backwards*

Plyometrics

Big 8:

- Skip for height*
- Skip for distance*
- Double leg forward*
- Double leg backwards*
- Mini hop bound*
- Mini hop backwards*
- Speed bound*
- Gallop drill*

Others plyo drills

Frog hops

Bounding drills

Speed bounding-sprinting one leg-alternating bounding (the same as triple and long jumpers)

Box Drills

- Depth jumps*
- single leg hops*
- double leg hops*
- single leg over boxes*
- lateral jumps*
- outside leg cross (concentration drill)*

Sprinter Box drills

- Depth jump with a hold*
- Depth jump over a hurdle*
- Depth jump over 3 hurdles*

Sand Pit drills (weight vest)

- Standing long jump*
- Standing triple jumps*
- Tuck jumps*
- double leg ankling drill*
- lateral hops*
- mini hops*
- mini hops backward*
- double leg backwards*

Hill workout (weight vest)

- All bounding*
- All sprinting drills*
- Bear crawls forward & backward*

Leg extension backwards up the hill
Piggy backs
Med ball carries
Med ball froggies

Running drills

Fly's
Ankling
High knees (toe up)
Butt kick toe up
Backward running heel to butt
Crossovers
A skip
Straight leg bound
High knee carioca
Flex leg bound
Tuck Jumps
Jump & go

Weights

Squats
Arm punch
Step ups
Single leg squats
Front Squats
Russian dead lift
Cleans with a press
Up right rowing
Leg extensions
Leg curls
Calf raises
MJ Drill

Med Ball Routine

Good mornings
Seated twist
360s
Overhead squat
Overhead back
Squat jump & toss
Between knees forward
Toss & Catch
Depth jump with toss

Modeling-Championship meet simulation. Prepare by experience go through the motions. Think of every scenario that might come up. Travel-time of competition-diet-rest-etc.

Coaching guidelines:

Never limit your athlete.

Prepare with knowledge and training.

Coach them as people first athlete second.

Don't assume anything.

Discipline is simply borders at which people can meet their goals.

Everything is possible.

Be true to them and yourself.

Don't build up things to make a monumental task.

Do something everyday to improve yourself.

Get your athletes to be the best all around people they can be.

Think on a different level.

Raise your level of consciousness.

Have a good time and make track fun.

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