

How to teach novice jumpers the basics of the high jump

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> hen you think about high jump, world class athletes like Charles Austin, Stefan Holm, Dusty Jonas, Jesse Lima, Javier Sotomayor, and Jesse Williams quick-

ly come to mind. But athletes like these are not born every day, and as coaches, we're more likely to find ourselves in the scenario I faced last summer.

On the first day of my high jump summer camp, I was approached by a young girl. After a brief introduction and warmup, I said, "Show me what you've got." Looking confused, she responded by asking, "What do you mean?" With a broad smile across her face, she explained she had never high

jumped before!

Having seen the Olympic trials on television, she decided to try the high jump. Camp would be the first time she'd ever jumped over a bar, and for all her lack of experience, this young lady came to camp for the right reason: She wanted to high jump.

Some first-timers come out for track to keep in shape for their main sport, and others join for the social aspects of being part of a team. As coaches, our first challenge is to keep them motivated to learn. Regardless of their reasons for coming to track, our job is to mold aspiring athletes of all shapes, sizes, and abilities. The question we attempt to answer in this article is: How do you teach high jump to someone who has never done it before?

Start by observing. At their first high jump practice, have athletes watch some high jump videos, which are widely available on the internet. In addition to motivating them, watching video will give them an idea of what the event looks like.

At this early stage, there is no need to discuss technique. After showing them some video and hearing all their "wows," let athletes jump a little while you observe them. If I make any comment that day, it's usually, "Let's imitate what we just saw on the video and have fun!"

Running. Before athletes can think

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about the number of strides, the curve, and the takeoff, they need to focus on running and proper body position. A good jump begins with a relaxed approach and proper body position, staying tall with hips high, chest up, shoulders back, and chin up but not overexaggerated.

To start, work on the approach separately from the actual jump. Begin with athletes on the straightaway and have them slowly transition into the curve. When athletes start the lean and transition, emphasize the importance of staying on the curve with the inside (takeoff) foot to create centripetal force and increase speed. Warn them against driving the curve with the outside foot, which results in a forced running motion and decreased speed.

Begin with a short approach. I don't recommend starting beginners with a full approach. Nine times out of 10, athletes will not know what to do with multiple strides and won't be able to control their body, which will lower their confidence. If they try to increase speed to the takeoff, the chances of injury increase greatly.

When athletes are ready to take some jumps, they should use a short approach. A five-step approach is an appropriate starting point for beginners, using a mark for the takeoff foot. Echoing the lessons they've been practicing, emphasize the importance of staying tall, keeping the hips high, and making foot contact underneath the hip, followed by a forceful push behind the hip. Proper body position should not be sacrificed to generate additional speed.

With this short approach, athletes should use some body lean from the start. If the curve is too wide, athletes will not lean, so keep the curve tight. On a short approach, the mark from the standard to the side should be between six to 10 feet, depending on the athlete's speed, strength, height, and body weight.

Even with a short approach, it is important for coaches to watch for common mistakes as athletes run the curve, such as rotating the shoulders, which creates a false sense of leaning. Another common mistake is running the curve on the toes. Though athletes may be able to get away with it on a short approach, the pressure they feel in the curve during a longer approach will increase and stability will become problematic, resulting in a need to decrease speed at takeoff. Running the curve on the toes is like running in high heels—the higher the heel, the greater the instability.

Penultimate and takeoff steps. Discussing the penultimate step with beginning jumpers often results in confusion. There should be a slight lowering of the hips, but if athletes concentrate on doing this in the penultimate step, they may sink instead, arriving at takeoff with low hips. To counter this, emphasize the importance of staying tall, with the upper body slightly back and the hips high while maintaining the lean into the curve through takeoff.

Arriving at takeoff in good position is crucial—this is where "the bullet leaves the barrel." At the moment of takeoff, athletes should imagine a line from the takeoff foot through the hip and all the way to the shoulder opposite the bar. Ideally, an athlete's body weight would be distributed evenly along that line at takeoff, and even though that's impossible—we're not shaped like javelins—the closer athletes come to that position, the higher their jumps will be.

As jumpers leave the ground, their hips should remain high. When discussing the action of the free leg, I use the term "thigh high" rather than "knee drive." Torque starts at the center, and talking about the knee could cause athletes to drive the knee at takeoff, leaving the hips down and behind. By bringing the thigh high at takeoff and not letting the knee rise over the hips, athletes can keep the center of gravity high while climbing.

The clearance. Despite the fact that most of what happens in the clearance is set up by the approach, the job isn't done until the jumper is on the other side of the bar. Athletes must keep their hips high and forward while rotating over the bar, and extend their legs while keeping the hips as high and forward as possible.

An analogy I use when discussing bar clearance is drawn from observations made standing behind the pit. In this position, I'm able to see the shoulders, followed by the chest, hips, and thighs. At that point, jumpers will extend their legs, indicating that they've rotated over the bar, and keep the hips high and forward throughout the clearance. In my analogy, the athlete's body is the earth rotating, as the sun illuminates New York (shoulders), then Chicago (stomach), Denver (hips), and Los Angeles (lower thighs). Putting the short approach together with the full approach. The number of strides a jumper takes with a full approach depends on the individual athlete. Among the factors to consider are how long he or she can maintain posture, speed, and control. If athletes run quickly but fail to maintain good position at takeoff, it's unlikely they will jump well.

To determine the appropriate balance of strides and speed, back up your athletes' approach two strides at a time and slowly bring more speed into the model created by the short approach. For example, if athletes were jumping with a five-step approach, back them up to seven steps.

For a left foot takeoff, the pattern should be L(mark)-R(initiate curve)-L-R-L-R-L(takeoff). As soon as athletes are comfortable with a seven-step approach, can maintain proper running and takeoff mechanics, and are ready to handle more speed, add two steps. Depending on the athlete, this development could take days, weeks, months, or years.

The high jump is one of the most technically demanding events in track and field. Success is built by learning to transfer horizontal momentum to vertical momentum, with one movement leading to the next in a chain reaction.

While the discussion of technique is seemingly endless, the mental aspect may be the most important for beginning jumpers to learn. When you have athletes who are eager to learn the event, positive instruction that builds confidence is essential. Lack of confidence will make it extremely difficult for athletes to learn the techniques you are trying to teach.

With confidence, they will soar to new heights with ease. A lot of life lessons can be learned through experiences in track and field, and if athletes learn a little bit about high jump along the way and are excited to return next season, you can consider your program a success. *

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