

Long Jump

Overview

The goal for the long jump is to reach maximum speed then use that speed to jump far into the pit.

Rules apply! Board, one foot take off, leaving the pit.

Training Points

Start-as discussed in the start lesson. Important not to lift torso too soon.

On the runway-the run up should smooth as possible . Eventually, when experienced and confident, the athletes eyes will be looking behind the pit and at approximately a 40 degree angle to the ground. The run up should as straight as possible and not zig zag down the track. Maximum velocity should be reached at the take off and maintained through the take off.

Pre take off- for JD level jumpers, simply dropping the hips slightly 2-3 steps before takeoff will create a position from which the athlete can lift off, achieving the desired angle of attack into the pit. As the second last and last steps are taken the athlete raises their hips,increasing their height so that at take off their hips are high with decreasing their speed too much. Sometimes called climbing the ladder. The last step should be shorter and faster than the previous ones.

Take off- the athlete places the take off foot solidly and flat on the board. Some coaches will ask to slap the board with their feet. This flat footed positioning allows maximum force to be applied. As the plant foot is down the trailing leg swings forward quickly , passing the hips over the plant foot as fast as possible. by thinking of lifting the body from the hips, the athlete can gain enough vertical height to maximise the forward momentum. Around 20 degrees is a good angle to aim for at take off. Some athletes can use a two handed lifting motion at take off, but a more simple method of an exaggerated sprinting arm movement may be more effective at this point. For more sophisticated jumpers as they head toward take off, the eyes should be raised , looking out the back of the pit. If the eyes are looking down, the head will go down and the jump will also tail down. Eyes up, body should follow.

In the air- for the jd level athlete, the most simple technique while in the air is to drive the hips forward , arms moving forward over the head with legs looking to end up side by side and extending forward and up ready to enter the sand. Too much forward extension can result in the athlete falling backward on landing as the centre of gravity is too far back.The longer the arms can be as they pass over the head, the more stable the upper body can be. The athlete is trying to avoid a forward body roll while in the air.

Landing- On landing the body should roll sideways and forward trying to maintain the spot that the feet first touched the sand as the furthest from the take off board. The arms can thrust forward to assist in getting the body forward on landing.

deceleration begins thus creating an environment where hurdles can begin to be hit. Rhythm is important throughout the race but especially from the half way point. Athletes should be encouraged to work their rhythm as they try to finish out the race.

Drills

bounding- have athletes bound 6-8 times with each leg. Rest 3-seconds then repeat for a second and third time.

pop ups- used as a warm up exercise, athletes run approx 5-6 metres and take off from the board accentuating height. On landing, athletes can allow the legs to crumple and then they can practise rolling forward and sideways.

Run up measuring-much anxiety is experienced when trying to run full pace and hit the take off board perfectly. At the jd level emphasis should be on developing a smooth consistent run up. First of all, just let the athletes run down the runway, even away from the pit is fine. Have them run about 20 strides. Watch each athlete individually and assess how long it takes to reach maximum speed and how long the athlete can maintain that speed. There is no rule for the actual distance of the run up, it is as individual as each athlete. Have each athlete do 3-4 of these runs. You will see a pattern develop for each athlete. Take that distance and now you can apply it to the run up. Take the anxiety away by having a take off area somewhere between two strips of tape placed 50cm before the take off board and 50 cm after. Measure back from the middle of this box to a spot that represents the length of the athletes predetermined run up. Allow the athletes the use their speed and jump from anywhere within this box. Without the worry of trying to stay behind the board it is hoped the athletes will allow themselves to run at full speed knowing they have a full metre to work with. Even if they think they will miss the box, encourage them to finish the jump as feedback and info can still be gained. If this can be done at the beginning of the season spending time with each athlete to get their first run up measured, it will hopefully save time later in the year. Now you can begin to refine the run up distance at each practise adjusting the take off spot to a place where it gets the athlete at the take off board.

Run throughs-athlete measures run up now they have one. Athletes run up as normal and hit take off board but instead of jumping, they run through the pit. A good way to check run ups before full jump practise or a meet.

Run up variables- even after working with athletes for a couple of months, run up issues can arise. begin at the top of the run up. Is the take off step consistent every time, or does it change in length from run to run? Are the first few steps the same speed or is each run up different. Has the athlete gotten stronger and faster so now the run up doesn't fit. Is there wind? A tail wind will push the athlete over the line, a head wind will cause them to struggle to get to the line. At meets, keep this in mind when marking runups. Some athletes like to measure their run up by running back from the take off board. if they run back into a headwind, their mark will be short, then exaggerated when pushed down the run up by the wind.

Take off drills-

5 step run up. First 2 steps to gather momentum then 3 fast steps to take off, climbing the ladder as mentioned previously. This allows more repetitions than using the full run up all the time. % step runups can still be evaluated for all the technical points of the jump.

Box drill-have a wide flat box on the runway placed at the take off area. The box is 4-6 inches tall. Using the 5 step run, athletes jump from on the box. The elevated take off allows more air time allowing the athlete to practise in air techniques.

Bungy cord- if height is not happening for the athlete, place a rubber bungy cord (the kind used for high jump practice) across the area after the take off board. The height will be determined by the athlete's size and the height required to get maximum use of the velocity.