

Mike Powell on Long Jump technique

Mike Powell shared his thoughts on long jumping technique at the 2008 Michigan Interscholastic Track Coaches Association (MITCA) seminar. In 1991, Powell broke [Bob Beamon's](#) long-standing world [long jump record](#) with a leap measuring 8.95 meters (29 feet, 4 1/2 inches). Updated January 17, 2017.

Long Jump Technique – Start

Powell: I try to have my athletes have a walk-in or a run-in start, or if they want to do a standing start, then just make sure they have another check mark, either the first step out or, really, the first cycle – the second step out.

Long Jump Tips – Overall Approach

Powell: I used a 20-stride approach – or a 10-cycle approach (a cycle being, just counting one foot).

Most of the time I try to (teach jumpers) to start off with their jump foot, but some people have got to start off with their right (foot). That's why cycles are good, because a 19-step approach is the same thing as a 20-step approach. It's still 10 cycles.

I would recommend for most of your high school athletes that you start them out with an eight-cycle, or 16-step, approach. ... Obviously you might have some great athletes, women or men (who can handle a longer approach). So if you take them to a 20-step approach, it would be three cycles in the drive phase, three cycles in the transition phase, two cycles in the attack phase and two cycles in the takeoff phase.

For the eight-cycle approach it would be two cycles in the drive phase, two cycles in the transition phase, two cycles in

the attack phase and then the takeoff is always the same, there are four steps.

Long Jump Technique – Drive Phase

Powell: The first part of the run is the drive phase. Similar to the way that athletes are when they're running a sprint. The difference is, in the sprint, you come out of the blocks. But in the drive phase of the run you're pushing, picking up your foot and pushing back. ... When you're driving, your head is down, you're not so much of a low angle when you're running, but you are pushing back, picking up the foot and pushing back, with the head down and driving the arms high ... to make sure that you're not falling, that you're keeping your balance.

Long Jump Technique – Transition Phase

Powell: The second part of the approach is the transition. Transition is a really important part because you're going from that driving phase to the attack phase, or the sprint phase. Now the same thing as in the sprints, take your time coming up. On the runway there's not much time. For me, I had six steps in my drive phase and six steps in my transition phase.

In the transition phase, wherever your head goes, that's where your hips are going to go. ... So when an athlete leaves the ground, if they're looking down, they're going down. If the head's going up, they're going to go up. What we want to do for that transition phase is take them from that down position, to an upward position where they can sprint. The best way to get them to do that is just to think about taking their head up slowly. As coaches, we just throw out a million things until something sticks and they get it.

What I try to do with my athletes is, I try to tell them, 'Think of your run, the transition phase, as if you were

looking at the numbers on a clock.' So for me, my transition phase was three cycles, so I knew that I would count three lefts. So if (at the start of) my drive phase my head was down, I was at six o'clock. Then in the first cycle on my transition phase I went to five o'clock. Then to four o'clock – head coming up. And then to three o'clock ... come up nice and smooth. Also, I would tell my athletes, Look down the runway, look at the board, then look at the pit. And then come up looking at the horizon.

Long Jump Technique – Attack Phase

Powell: I would always think about trying to go up ... that means you have to get tall and bouncy and go up, thinking up. Everything is always up. Light and quick on their feet. The attack phase typically should always be two cycles, four steps. It doesn't take very long to get to your speed when you do it the right way. It's a different type of running than in the transition (phase). The attack is a different type of running, so they can put that full effort into each part without using so much energy. The trick is to do all those things correctly down the runway to get to the takeoff, and that's the big payoff.

Long Jump Technique – Takeoff

Powell: You want to bring your speed to the board, and hopefully to your penultimate step (the next-to-last step). To get your athlete to go vertical ... you want to have them coming in with the highest position. On the next-to-last step you're going to go down from the highest position to a flat foot – it's a long step. Then the next step is a short step. You take your hips from (a high) position to a lower position. That short step takes the takeoff angle and your hips are now facing up. That creates the situation where the athlete doesn't have to try to jump. The biomechanics allow them to get off the ground.

At the lower levels, just have them think about making the last two steps really quick. Basically what that means is, they're not going to reach. They're going to carry their speed into the board. The second tier athletes, we'll tell them to go to that flat foot on the penultimate step and try to have a long-step, short-step. Long step is a flat foot.



At the higher levels, especially a really, really talented kid who's also smart, that can handle it, you can break it down further. One of the main reasons why I was able to jump as far as I did was because I was able to take my speed into the takeoff. And what I did, what I call the push-pull-plant, going into the penultimate step – you go to a flat foot, you're going to lose speed, because you spend more time on the ground – but what you want to try and do is limit how much speed you lose. So you push into that penultimate step.

The pull comes from the pulling action from over the top of that flat foot. It's like a fixed lever. Just before the foot hits the ground it's pulling back. It's rolling from the heel to the toe. Pulling that way.

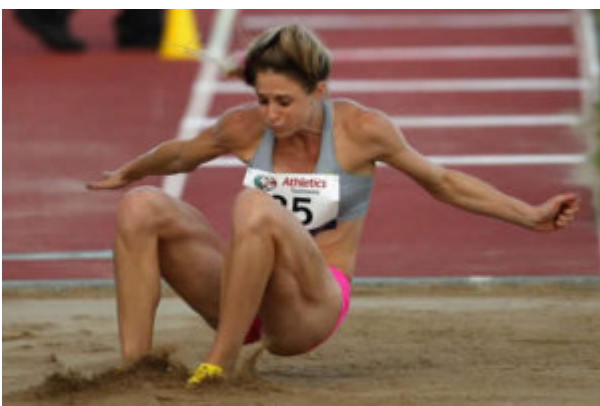
The next part will be the plant. The plant is not a high heel recovery, it's a low heel recovery to a flat foot, and then a punch. That's what gets you off the ground. Punch the elbow

back (using the opposite arm), punching the knee, shrugging the shoulders, lifting up the chin. Everything going up. So when they hit the board at ground contact the shoulders are behind the foot. But when they take off, they're over the top foot. Hips high. Good speed. Force into the ground. That's what makes for (long) jumps."

Long Jump Tips – Flight and Landing

Powell: Once it leaves the ground the natural tendency for the body (is) to flip. ... So what you want to do is block and fight that forward rotation. Lengthen the body out, block the arms, keep the body elongated as long as possible before landing. ... So you want to make sure that you're hitting (the board) behind the foot and then taking off over the top of the foot, and everything going up.

Keep your body upright, get yourself into a position when you come into the landing, where you're not bending over, but assume a position where you can lift up the knees, extend the heels, hit the sand with the heels and pull to the side to make sure that the butt is clearing the heels, or the European way, where they hit and pull and scoop through.



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