Getting the beginning javelin thrower off to a great start

Intro: Why is a Frisbee thrown differently than a ball?

Answer: Shape.

A Frisbee has unique aerodynamics that will greatly aid the throw, if thrown properly. Those same aerodynamics will punish the throw if thrown wrong.

The javelin also has unique aerodynamics when thrown directly through the point. It will have some lift capabilities (wing shaped) and low amount of drag (forward air speed maintained). When thrown wrong (at an angle to its flight path) you achieve no lift and end up with a high amount of drag (forward air speed quickly decelerates to zero).

A) The importance of throwing with the hip:

1) How: Imagine an invisible wall going straight up from the heel of the plant foot. Throwing with the hip means: Hip hits the wall first

Shoulder next

Then Hand

Head last

Contrast that with how every beginning javelin thrower will want to throw:

Head hits first

Shoulder next

Then hand

Hip last if it even hits the wall

2) Why: Short catapult driven by weaker muscle group vs. long catapult driven by stronger muscle group.

There is significantly greater power when throwing with the hip. Very important in shot and discus but critical in the javelin throw because of the shape of the implement.

All energy accelerating the javelin must follow directly along its shaft so it flies through the point (low drag/ high lift). Any energy deviating from that path will cause the javelin to fly at an angle to its flight path (high drag and no lift).
Demonstrated.

B) Drills for teaching how to “throw with the hip”.

#1) Javee drill.

This drill breaks throwing with the hip down into its base components. The first component is introduced and drilled until all throwers can do it properly. Then the next component is added and drilled. Then the next and so on… This drill evolves over the course of 4 to 6 weeks. It is specifically designed to provide the very high number of repetitions necessary to build the new muscle memory needed to consistently throw with the hip.

Phase #1: Proper throwing position and hip drive.

“Hip to coach’s hand”

10 X 10 sets repeated until proficient

Phase #2: Upper body rotation (rather then head lunge).

“Coach’s hand in the face”

10 X 10 sets repeated until proficient

Phase #3: Introduce block arm. (helps with #2)

“Punch self in shoulder or elbow the person behind you”

10 X 10 sets repeated until proficient

Phase #4: Javelin stuck in ground 4” behind block foot.

“Knock javelin over with the hip”

10 X 5 repeated until proficient

Phase #5: Demonstrate drill 5 times perfectly and immediately do a standing throw with the javelin.

Repeat until thrower shows proficiency doing standing throws done with the hip.

Phase #6: Same as #5 but progressing to one step, 3 step and full run-up throws all while increasing to 100% power.

Rope Drill:

Similar to Javee drill but with emphasis on strength building. Thrower should feel the pull/stretch along entire arm and torso.

Drill demonstrated.

C) Javelin Boots:

The absolute traction of proper foot ware cannot be over emphasized. Javelin boots are a must. J heels are a poor substitute.

The absolute traction is needed to overcome self-preservation instinct. Overcoming that instinct takes time.

Start a shoe bank.

D) The run-up/approach:

For beginning throwers the run up should be slow. No more than a fast walk.

Needs to be exactly the same every time. Same # of steps, same length of steps etc… This needs to be practiced.

Slow, relaxed, smooth and rhythmic acceleration.

E) Questions