

- Identify Talent
  - Always look for athletes with both speed and coordination.
  - If an athlete has speed, you can train the coordination.
  - Start coordination training early. Encourage trying many events.
- Approach / Runway
  - 12 to 18 Steps
  - Rhythm
    - 3 phases: Push, Lift, Turnover
    - Push-Push-Lift-Lift-Turnover-Turnover-Turnover
      - (the rhythm when counting only 1 foot down the runway)
  - Start Positions: Standing, Taking some steps, or Skip into the run
  - Push Phase
    - Purpose is to create inertia.
    - Shoulders should be almost in front of the athlete's hips at the start of the first push.
    - When pushing you want a full body lean with full, or triple, extension.
  - Lift Phase
    - The push phase will gradually transition into the lift phase as the athlete rises.
    - The lift refers to the athlete's hips lifting into position, which should create good knee lift.
    - It should take a few steps to lift up into a good upright position.
  - Turnover Phase
    - At this point the athlete should be in a good up right running position and close to top speed.
    - This phase begins between 6 to 8 steps out from the board.
    - This is where visual steering starts.
    - The athlete should increase arm cadence and accelerate through the board.
    - Try and put your foot just behind the board - not on it - and you will be on the board.
- Takeoff
  - Penultimate Step
    - The second to last step.
    - The athlete should slightly lower the hips. To achieve this, the athlete should land with the foot dorsiflexed and flat footed. The same bend in the leg as if they were running. This should be very subtle.
  - Takeoff Step
    - The last step should be slightly shorter than the rest and land with the foot dorsiflexed and flat footed.
  - The takeoff is a pushing action.
  - As the athlete's foot leaves the ground, the takeoff leg should be in full or triple extension.
  - Good knee separation, creating a good stretch reflex.
  - Drive Knee
    - The free leg at takeoff should swing into a good drive knee position.
    - As the athlete leaves the ground, the drive knee should be parallel to the ground and perpendicular to the upper body. The foot should be under the knee in a dorsiflexed position.
  - Arms
    - The arms at takeoff should ideally be a single arm punching action.
    - This will keep more of a running motion through the board, helping maintain speed into the jump.

- Air Mechanics
  - In long jump, once the athlete leaves the ground, the body naturally wants to rotate forward and return to the ground. After takeoff, all the athlete is trying to do is minimize the forward rotation until landing.
  - The athlete has a few options for what to do in the air: the hold, the hang and the hitch kick.
- The Landing
  - The athlete will stretch the legs out in front of them, while at the same time also reach the hands out in front of them. The hands will pass by the feet and run up the outside of the legs until the hands come to rest at the small of the back. We call this “Putting on the Pants”.
  - At this time, the back of the heels should be hitting the sand first. The legs should collapse and the butt should land slightly off to one of the sides of the feet in the sand. The head should remain in a neutral position.
- The Hold – See Figure 1
  - Run off the board. As the athlete leaves the ground, the drive knee should be parallel to the ground and perpendicular to the upper body. The foot should be under the knee in a dorsiflexed position.
  - The athlete’s arms will move in opposition of each other and of their legs. The arms will hit a slight blocking motion and then extend up to meet above the head - stretching upward.
  - After takeoff, the athlete’s drive knee will stay - or “hold” - that position. Meanwhile, the takeoff leg will be brought up to meet the drive knee leg.
  - The athlete will be in a seated position with their arms stretched above their head – like sitting in a chair. Stretch the middle of the jump.
  - This seated position with both arms stretched above the head should be held until the athlete approaches the sand.
  - Execute the landing technique.
- The Hang – See Figure 2
  - Run off the board. As the athlete leaves the ground, the drive knee should be parallel to the ground and perpendicular to the upper body. The foot should be under the knee in a dorsiflexed position.
  - The athlete’s arms will move in opposition of each other and of their legs. The arms will hit a slight blocking motion and then extend up to meet above the head - stretching upward.
  - After takeoff, the athlete’s drive knee will drop down and meet up with the takeoff leg.
  - The athlete should never arch the back.
  - With the arms and legs fully extended, the athlete’s body creates a long lever which helps slow forward rotation.
  - Then the athlete will pull their knees up into a seated position with their arms stretched above the head – like sitting in a chair. Stretch the middle of the jump.
  - This seated position with both arms stretched above the head should be held until the athlete approaches the sand.
  - Execute the landing technique.

- The Hitch Kick – See Figure 3
  - Run off the board. As the athlete leaves the ground, the drive knee should be parallel to the ground and perpendicular to the upper body. The foot should be under the knee in a dorsiflexed position.
  - The athlete's arms will move in opposition of each other and of their legs. The arms will hit a slight blocking motion. Then the arm that was driven back will rotate backward, traveling around and up over the head, continuing out around in front of the athlete, swinging down and around and back up, and stopping stretched above the head. The arm that was driven forward will stop and switch directions and rotate backward, swinging around and up until it stops stretched above the head, waiting for the other arm to meet it.
  - After takeoff, the athlete's drive knee will drop down. At the same time, the takeoff leg will step over the opposite knee with a high heel recovery, reaching a position parallel to the ground, then drop down. The initial drive knee leg will, with a high heel recovery, step over the knee and end up in the original drive knee position – parallel to the ground. Then the takeoff leg will, with a high heel recovery, step over the knee once again and meet up with the initial drive knee leg.
  - The athlete will be in a seated position with their arms stretched above the head – like sitting in a chair.
  - This seated position with both arms stretched above the head should be held until the athlete approaches the sand.
  - Execute the landing technique.
  
- Jump Training
  - Always High intensity.
  - Volume of Jumps
    - Very dependent on the individual and training age.
    - Early season: higher volume.
    - Late season: lower volume.
  - Frequency of Jumps
    - For some athletes, the meets themselves are the only practice they do for the jumps.
    - In season, I practice jumps once a week to not at all.
  
- Speed Training
  - Always High intensity.
  - 48-72 hours of recovery before hitting the energy system again.
  - You must act like a sprint coach when coaching the jumps.
    - Develop proper sprint mechanics.
    - Emphasize speed.
  - Acceleration vs. Top Speed
    - Acceleration is how much you can change your speed. You must accelerate at takeoff in the long jump.
    - Top speed is the maximum speed you are capable of achieving. If an athlete hits their top speed before they reach the takeoff board, they will not be accelerating off the board, and may even be slowing down at takeoff.

- Acceleration, Top Speed, Run-Throughs
  - Pre-Season
    - Focus on acceleration.
    - I like to work on parts of the run-throughs.
  - Early Season
    - Focus on acceleration and top speed.
    - Put it all together and practice the whole run-through.
  - Late Season
    - Focus on top speed.
    - I almost always do speed work or run-throughs two days out from competition.
- Warm-Up for Competition
  - Always wake up at least four hours before competition.
  - No static stretching within two hours of competition.
  - Dynamic warm-up.
  - Do at least two full approach run-throughs with pop-offs. The pop-off provides feedback to the coach as to which step is the athlete's takeoff, where it is occurring, etc.
  - Do at least two short approach jumps.
    - Make the last couple of short approach jumps a little longer to make it feel like the real thing.
    - Never do full approach jumps in warm-up.
- KISS and Enjoy
  - My coaching philosophy.
  - Keep It Simple Stupid! And enjoy the process!
  - There is a good deal of technique in the long jump and all kinds of things to look for in a jump, but don't overwhelm your athlete or yourself.
  - Find three things at most that your athlete needs to work on or do to get better, and keep those as the theme of the year.
  - One step at a time, enjoy the process and the outcome should come.