2020 Sacramento Super Clinic

Approach and Takeoff for the Pole Vault

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Approach and Takeoff for the Pole Vault

Safety for All the Jumps

- Landing areas should be free of debris and obstructions
- The takeoff area should be visible, stable, in good condition
- Athletes should be properly instructed and supervised
- Athletes should wear proper footwear

Safety in the Jumps: Pole Vault

- The back of the plant box should be 105 degrees
- Keep an eye on the box collar
- Poles should be stored in a protective case
- Attempting to loosen poles by bending them should be avoided
- Pole plugs should be correctly sized and kept in good condition and changed periodically

Safety in the Jumps: Pole Vault

- The landing pit and the front extensions that surround the box should be large enough, and larger is always better
- The landing area should be in close proximity to the box
- The pit should be kept in the proper position, and should be adjusted when it moves
- Padding should envelop the base of the standards and any projections on the standards
- The bases of the standards should be adequately weighted to prevent toppling

Talent Demands for the Jumps

- The primary characteristics required for success in the jumping events are:
  - Speed
  - Power
  - Ability to come off the ground in extension
- Taller athletes may have an advantage, but do not neglect the smaller athlete who is strong in these areas

General Concepts

- Horizontal and vertical velocities of body are the two components that combine to form takeoff angles in the jumps
  - Horizontal velocity is developed in the approach
  - The takeoff should produce vertical velocity, enabling the vaulter to swing on the pole
- Prepare for being lifted off the ground
- Vaulter come off the take off in extension

Pole Classification

- **Poles are classified in two ways**:
  1. Pole Length
     - Shorter poles enable developing vaulters to grip lower, while longer poles enable better vaulters to grip higher
     - Should be gripped in an area 6-18 inches from the end of the pole

Pole Classification

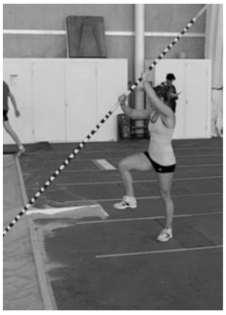
2. Bodyweight Rating
   - Weight rating represents the maximum body weight limit of a vaulter using that pole
   - Athlete in competition should use the stiffest pole possible, but not so stiff that penetration or technique is sacrificed

Teaching Guidelines

- The vaulter should understand that a good pole plant guarantees both success and safety
- Emphasize horizontal movements of the vaulter and pole movement
- Emphasize landing in the center of the pit
- De-emphasize bending the pole
- Emphasize vault efficiency over excessively high handgrips
- Emphasize taking off in a balanced position over the take-off foot.

Ground Takeoff

- Grip where the pole doesn't pick up the beginner to start
- Hands should be positioned so that when pole is held overhead, both palms face inward
- Hug the pole, keep it close to your shoulder when in the air
- Get ready to hang and step out past the pole with the lead knee



Ground Takeoff

- Balance the pole so when taking off and landing you are right next to it
- Land on feet standing straight up
- Lead leg up and takeoff leg moves straight

Establish the Approach

The approach is done at maximum controllable speed…

1. Start: low and slow out of the back, step out to set-up the stride. Start with a forward lean, pick up the foot and put it down. Use the entire foot as a platform
2. Keep the runway marks to a minimum, a starting mark, a coach/athlete check and the takeoff
3. Check tempo & rhythm. Have your athletes warm up running with the pole.
4. Check the position of the pole tip

The Approach

- Goals of a good run:
- Lean forward from the ankles and keep the legs under the body
- To achieve accuracy and consistency in the takeoff step
- To achieve good body positions for takeoff
- It is a progression from acceleration mechanics to maximal velocity mechanics

The Approach

- Frequency and stride length are inversely proportional
- Do not move the athlete's starting checkmark indiscriminately
- Speed should not be developed at the expense of faulty mechanics, nor should it be so excessive that the jumper is out of control and the effectiveness of takeoff is diminished

The Pole Carry

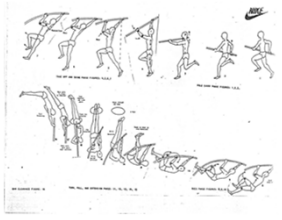
- Slightly wider than shoulder width
- Top hand should be positioned within the assigned grip range of the pole
- Hands should be positioned so that when pole is held overhead, both palms face inward
- Vaulter balances the pole
- Elbows at 90 degrees

The Pole Carry

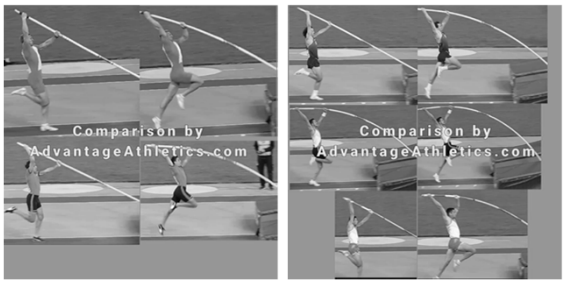
- Top hand: slightly behind the left hip
- Bottom hand: near the center of the chest, with wrist flexed so pole rests on between thumb and first finger
- Both hands should be closed loosely
- Shoulders square to the box

Planting the Pole

- The arms start on the second to last takeoff step (left leg for right handers)
- The arms will time-up with the legs!
- Finish before the plug hits the back of the box
- Arms up with pole balanced in front of vaulter



Pole Plant Comparison



Pole Alignment and Drop in the Approach

- Initial Position of pole tip depends upon grip height and weight of the pole
- Drive Phase Mechanics
  - Pole Alignment
  - Direction of Force Application
- Bubka forward and ready to plant

Pole Alignment and Drop in the Approach

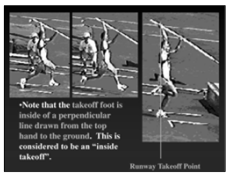
- The Pole Drop
  - Timing the Pole Drop
  - Bottom Hand/Arm Action
  - Top Hand/Arm Action
  - Lateral Pole Movements

Creating a High Pole Angle

- Goal: move the pole to vertical
- It is obvious then that the pole must be as high as possible at box impact
  - Vaulter should be in a tall/extended position
  - Arms extended
  - Takeoff foot directly under top hand at takeoff

Lateral Alignment

- At takeoff:
  - Shoulders should be parallel to crossbar
  - Top arm extended completely upward
  - Bottom hand positioned in front of the opposite shoulder



Takeoff Angle

Takeoff angle in the pole vault should resemble that of long jump

A Vaulter should:

- Use slight preparation on the penultimate step
- Aggressively extend off the ground in a forward and upward direction
- The pole will pick up the vaulter! The takeoff is NOT a jump as in LJ but a timed extension off the takeoff foot in conjunction with the top arm.

Standard Placement

- Rules allow for the standards to be moved in a direction parallel to the runway
- Adjustment is often needed as a result of environmental factors and pole characteristics
- It is better to keep the standards back
  - Improves safety and emphasizes horizontal components of takeoff
- Standards should not be moved haphazardly

Pole Selection Guidelines

- Five basic guidelines that govern decisions about grip height/pole length and pole stiffness:
  1. Poor penetration + large pole bend = lower grip
  2. Poor penetration + small pole bend = choose a softer pole that is still rated at or above vaulter's weight
  3. Excessive penetration + large pole bend = stiffer pole
  4. Excessive penetration + small pole bend = raise grip
  5. Landing left or right of center regardless of pole bend = lower the grip

Teaching / Training Guidelines for the Jumps

- Runway and approach work can be done without takeoffs or with modified takeoffs in all events
- 95% of all your jump work is running and establishing a consistent approach
- The majority of technique work, especially in the horizontal jumps, should be done from runs shorter than those used in a meet
- Stop workouts when fatigue creates technique problems
- Break movements down into easily practiced and mastered parts in early stages of learning

Teaching Progressions for the Pole Vault Approach

- Ground vault/long jump pit
- Standing Pole Drops/hurdle plants/three step plant
- Approaches hitting a towel or sliding box
- Rehearsal with/without Takeoff
- Takeoff leg/top arm timing drills