

Considerations for the High Jump

Mike Erb
Assistant Women's Track and Field Coach
University of Illinois

Overview

- Commonalities
- Considerations for the Approach
- Training Inventory
- Program Design

Commonalities

- Acceleration
 - Body Angle/Shin Angle
 - Complete Extension of Joints
- Arm Action

Commonalities

- Posture
 - Ankle/Hip/Shoulder Alignment
 - Summation of Forces
 - Maintenance thru Takeoff

Commonalities

- Ankle Dorsiflexion
 - Pre-Tension in Foot
 - Toes Up

Commonalities

- Sprint Mechanics
 - Vertical Pushing
 - Combination of Posture/Acceleration/Dorsiflexion
 - Maintenance while Curve Running

Commonalities

- Takeoff Mechanics
 - Penultimate Step
 - Rhythm to Jump
 - Foot Contact at Takeoff

Approach Considerations

- Starting Point Dependant on Several Factors
 - Strength of Athlete
 - Speed of Athlete
 - Experience of Athlete
- Do not allow athlete to have more approach than they can handle

Approach Considerations

- Linear to Curve
 - Regardless of length of approach, both linear and curved running must be present
 - Generally speaking, the number of linear and curved steps will be close to equal
 - Maintain straight forward visual focus during linear portion of approach

Approach Considerations

- Transition
 - Initiated by pressure on outside foot
 - Anticipate curve initiation
 - Body must transition as a whole
 - Slight turn in outside foot

Approach Considerations

- Curve Running
 - Maintain total body lean
 - Long axis of foot must remain on curve at all times
 - Entire body must remain perpendicular to curve
 - Vertical pushing must remain, although at angle
 - Outer arm begins deviating from mid-line

Approach Considerations

- Takeoff
 - Visual Focus on left standard
 - Lowering of Center of Mass
 - Heel Lead, Flat Foot Contact
 - Takeoff occurs just inside right standard, distance from bar determined by athlete's ability
 - Double Arm vs. Single Arm

Over the Bar

- Rotation will occur only if approach and takeoff are properly executed
- Lead leg drives and drops to allow movement in hips
- Allow shoulders to follow parabolic curve
- Chin to chest for leg clearance

Training Inventory

- Many roads to Rome
- How more important than what
- Identify necessary components
 - Plyometrics/Stretch Shortening Cycle
 - Sprint Mechanics
 - CNS Demands

Training Inventory

- Exercises
 - Circle Running
 - Serpentine Running
 - Short Approach Jumping – work from the bar backwards
 - Full Approach Rehearsal

Training Design

- Complimentary vs. Compatibility
 - Key to training design is understanding demands placed on the body
 - Complementary training requires different demands, allowing one system to recover
 - Example: high demand plyometrics followed by general strength work
 - Compatible training places similar demands on body and its systems and should be used together
 - Example: high demand plyometrics and olympic lifts

Training Design

- Every Day is High Jump Practice!!
 - Regardless of the exercises performed, be sure to know the "why" of what is done
 - Never sacrifice quality for quantity
 - Look for teachable moments from warm up to cool down
 - **Have Fun!!!!**
