Considerations for the Long Jump

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Overview

- Commonalities
- Considerations for the Approach
- Considerations for the Jump
- Drill Progression
- 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
  - Maximal Velocity Running

Commonalities

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

Commonalities

- Flight/Jump Mechanics
  - Maintenance of Posture
  - Conservation of Rotational Forces
  - Preparation for Landing
  - Landing Considerations

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

- Acceleration Mechanics
  - Starting Position
  - Complete Pushes
  - Large Amplitude of Movement
  - Postural Maintenance
  - Transition to Maximal Velocity

Approach Considerations

- Maximal Velocity Mechanics
  - Maximal vs. Ideal Velocity
  - Foot Contacts
  - Vertical Pushing
  - Conservation of Posture

Approach Considerations

- Penultimate Step
  - Last Step Prior to Takeoff
  - Lowering of Center of Mass
  - Amplification of Established Rhythm
  - Faster and Shorter than Previous Steps

Approach Considerations

- Takeoff
  - Foot Contact
  - Complete Extension
  - Postural Alignment
  - Leg Swing/Knee Drive
  - Arm Action

Flight Considerations

- Conservation of Rotational Forces
- Hang vs. Hitch Styles
- Preparation for Landing
- Landing Considerations

Training Inventory

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

Drill Progression

- Gallups
  - 2 step/4 step
  - Posture/Rhythm/Foot Contact/Free Leg
  - Vertical Pushing
- Short Approach Work
  - Varying Distances
- Landing Progression

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 Long 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