

## ***Technique & Teaching the High Jump***

***West Coast SuperClinic***

Terry VanLaningham  
Sacramento State  
[tlvanlan@csus.edu](mailto:tlvanlan@csus.edu)  
916-278-6208

## ***WHAT KIND OF ATHLETE TO LOOK FOR (Physical)!***

1. Body Type (Tall / Long Levers / Mesomorph)
2. Speed
3. Power
4. Body Awareness / Motor Control
5. Suppleness / Flexibility
6. Someone that can jump high!

## ***WHAT TO LOOK FOR (MENTAL)!***

1. Self-Confidence
2. Positive (Glass is Half full)
3. Focused (Not easily distracted)
4. Goal Oriented (Cares about the end result)
5. Emotionally Controlled (Stable)

## ***WHAT is the Objective?***

1. Make the Bar?
2. Jump High?
3. Jump-High then make the bar!

## ***5 BIOMOTOR ABILITIES***

- The 5 S's
  - Speed
  - Strength
  - Skill
  - Stamina
  - Suppleness



## ***PSYCHOLOGICAL CONTROL***

- Arousal
  - The level of mental and physical ups and downs.
- Emotional
  - Time specific state of mood.
- Attention
  - Ability to narrow focus.



## **DEVELOPEMENT**

1. Maintain Strengths while improving weaknesses
2. 80% / 100% - Do not Overtrain!!!
3. DMR = Daily Maintenance Routine

## **Teaching Progression**

- Approach
- Take-off preparation / Plant
- Take-off
- Flight/Clearance

## **Approach**

1. Drive phase (first 2-4 strides)
  - a. Low Frequency / 45 shin angle / vertical at 2<sup>nd</sup> or 4<sup>th</sup> stride
  - b. Visual cue check mark
2. Continuation phase (4-5 or 5-6 strides)
  - a. Initiate curve on 3<sup>rd</sup> or 5<sup>th</sup> / Outside pressure / Visual cue inside standard
3. Transition phase (final 2 or 4 strides)
  - a. Inline body lean / shoulder axis remain perpendicular with curve / foot touchdown on curve parallel to curve / Visual cue opposite standard



## **Take-off Preparation**

1. Take off preparation
  - a. Third to last step must be full and not compromised – Pre loads plant / take off
  - i. Penultimate step
    1. Contact preparation – ankle flexion, quadriceps tension
    2. Heel leads back towards ground, flat foot contact
    3. Majority of hip lowering occurs after contact and forward
    4. Great horizontal displacement of hips prior to contact of penultimate
    5. Hip axis slightly toward pit



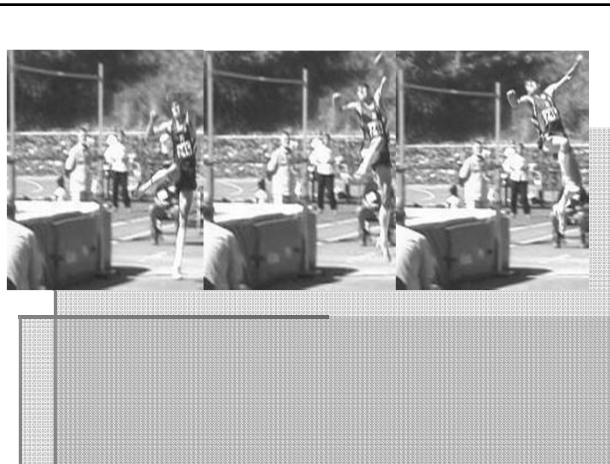
## **Plant**

1. Low heel recovery to aid in foot placement and support stabilization
2. Lead with thigh
3. Flat foot landing (in front of hips C of M)
4. Foot placement parallel to bar
5. Shoulders perpendicular to bar / inside shoulder lower
6. Body lean away from bar



## **Take Off**

1. Complete, uninterrupted firing of joints while on the ground
2. Conservation of postural alignment during free leg swing (thigh)
3. Free leg swing block complete to 90 degrees and held in the direction of the curve
4. Arm movement displays some extension and large range of motion upward in the line of the curve and blocks at the shoulders
5. Rotation in all three planes due to hinged movement activity after release
  1. Forward rotation (sagittal plane) small amount
  2. Lateral rotation (frontal plane) large amount created by lateral hinging that occurs during support phase of take-off
  3. Turning (transverse phase) occurs at the same time of the release (push off) from the ground, so that rising and turning occur simultaneously and at the same rate
    - a. Holding the free leg momentarily will result in the axis rotation from the ground

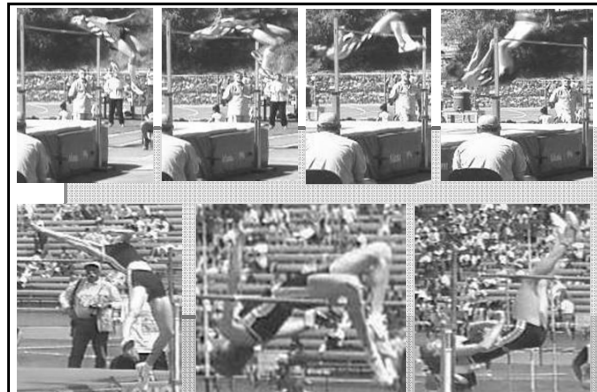


## **Flight / Clearance**

1. Slight hyperextension of hips (lay back) or arch back
2. Relaxation of iliofemoral joint (Femur externally rotates, knees flare out) – Holds lay back position
3. Arms return to side, with hands next to or above hips
4. Knees are flexed

## **Flight / Clearance - Continued**

5. Head and neck should be near cross bar early in flight
6. The hips rotate over and above the head as they cross the bar
7. Once the knees are above the bar the head should be lifted towards the chest to facilitate lifting the feet over the crossbar (end and middle / middle and ends)
8. Land high on shoulders



## **FINAL THOUGHTS**

- Train the person first / athlete second.
- Teach then Coach.
- Be flexible.
- 80 / 100.



## **QUESTIONS?**

- THANK YOU!



## ***Technique & Teaching the High Jump*** West Coast SuperClinic

Terry VanLaningham  
Sacramento State  
[tlvanlan@csus.edu](mailto:tlvanlan@csus.edu)  
916-278-6208