# High Jump:

A Minimalist Approach

Coaching and training theory are just that; theory.

The following are my opinions are based on experiential learning.

## Why minimal?

The event can be extremely technical or remarkably simplistic. You choose!

Mapping the curve is a great example: Elite jumpers probably need this. Entry level... throw your keys on the ground!

The event is precision effort. No fatigue is necessary to train effectively. By nature, it is a minimal event!

Tony Holler's "cats" philosophy

How many jumps do the best take? (9)

How many of the best have other things to do that day?



## Demands of the Event

What is actually happening in the high jump?

\*\*\*SINGULAR, FAST, CONTINUOUS, RHYTHMIC MOVEMENT\*\*\*

#### Completely anaerobic

- under 7 seconds; 1-4mR
- A no sweat event

#### Rhythmic

- Fixed number of steps
- Approach as a dance

#### Powerful

- nothing about jumping is slow
- Impulse at takeoff; maximal force, minimal ground contact time

#### Strength = Posture

- Pole Vault! The leg as the pole
- What happens when the pole is too soft? (recoil delay, blow through)



## Talent Recognition

High Center of Mass; particularly in females

- Vlasic is 6'4" and jumps 6'10" (+6")
- Kynard is 6'4" and jumps 7'8" (+16")

The event is relative! Wanna clear 6'10"? Don't be 5'7"!

General Flexibility

Spacial Awareness

Postural integrity/Strength

SPEED!!! Limiting factor. Any tall kid can flop over a bar from short and fall apart from full.



## The Exception

There are always exceptions!!!

- 5'11" and jumped 7'10" (+23"!!!)





## Vertical Power Testing

#### Countermovement Vertical vs 3-step

- Vertical isn't a great KPI
- Men 8"+ Differential
  - Jesse Williams 29" to 42" (+13")
- Women 6"+ Differential

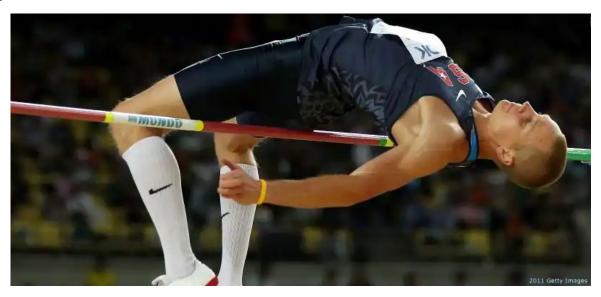
#### RSI (rapid strength index)

Expensive test but great indicator

#### Overhead Back Throws

#### Clean

- W-0.85
- M-1.25



# Foundational Efforts

Weight room

Drills: Approach & Layout

Jumping!

## The Weight Room

#### Minimal Effective Dose Principle

- GPP = 3-4x a week
- SPP = 2-3x a week
- Comp = 1-2x a week
- Peak = None

#### The Movements

- Full Back Squat (W-1.4, M-1.75)
- Clean from Hang Position (W-0.85, M-1.25)
- Ballistic Lifts (weighted jumps)
- Med Ball Throws
- Postural Integrity Circuits
- Ankle work (often ignored)



## **Essential Drills**

#### Jump Fundamentals

- Gallops, Continuous takeoffs, skips for height, run run jump, baby bounds...
- Long jumping on a curve!

#### Approach

- Circle Runs (varying diameter)
- Serpentine Runs
- Figure 8s
- Fundamental Jump Drills on a curve

#### Layout

- Hip Bridging
- Dolphins
- Raised Back-Overs



## Jumping!

#### How often?

- 2-3x a week including comps
  - Separate short and full quantities
- Less is more late in the year!

#### Short vs Full? 4-6 vs 8-10 steps? Debate!

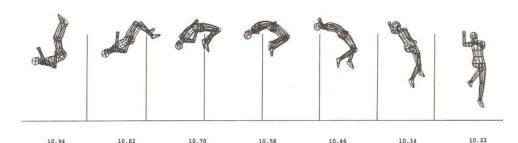
- Layout/Takeoff work from short
- Shorts can be more volumetric (>20)
- Work approach from full separately
- Fulls should be comp style (>10)

#### What heights?

- Shorts at 85% current best
- Fulls at 105% current best (jumping high in practice CRITICAL)
- Height matches the run

#### Cues and Focus Points?

- Isolated Focus from short
- Self directed Fulls (let the jumps talk)





### Some Nuance

Good high jump is 90% approach!

First attempt importance

- 80% success rate at non-exit bars

Rollover starts; no skipping, jog-in, etc for novice athletes

Outside Initiation of the curve

Full footed contacts throughout the curve

High outside shoulder throughout curve

Eyes on top of near standard until curve initiation

Move eyes to top of far standard in curve; eyes up!

Penultimate step, COM lowered by leaning at the ankles, not sinking into deep flexion of the hips and knees.



## More Nuance



#### Takeoff Position

- Men 36-60" away
- Women 18-36" away
- Just inside near standard

Takeoff foot to the back corner of pit and ON THE CURVE

"Step through the door" into takeoff

Shoulder Axis critical to posture at takeoff; perpendicular to bar axis

The longer you're on your penultimate, the slower the takeoff!

Big toe of swing leg coming through the takeoff leg calf

Blocking thigh should be met by the takeoff thigh should come to meet it

Block with both upper arms at parallel to the track

Separate the knees at the apex of layout to open the hips fully

Drop chin to chest upon descent

## Thank You!