HORIZONTAL JUMP SKILLS

DECEMBER 2019
USTFCCCA Convention
Technical Symposium
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Discussion Outline

- Influences
- Physical Performance Components
- Horizontal Jump Skills
- Pre-Season Training Examples
INFLUENCES
Working in the Ivy League, it’s evident that successful coaches teach more than the X’s and O’s – they also consider ...

- Semester Schedule
- Concentrations
- Time Management Skills
- Mental Health
Coaching is HARD Because ...

Calvin & Hobbes

I’m a great believer in the value of novelty.

I say anything new is good by definition. It can shock, insult, or offend me, so long as it doesn’t bore me!

If you can’t give me something new, then repackage the old so it looks new! Novelty is all that matters! I won’t pay attention if it’s not fresh and different!

by Bill Watterson

I see why timeless truth doesn’t sell. Give me a good flash in the pan any day.

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You’ve Been Robbed!

- Moose Akanno (UCONN)
- Chris Bostwick (Clemson)
- Fletcher Brooks (Iowa State)
- Jesse Chapman (Columbia)
- Michelle Eisenreich (Princeton)
- Mike Eskind (UNC)
- Jeremy Fischer (USATF)
- Ron Grigg (Jacksonville)
- Quincy Howe (Wyoming)
- Ken Hunt (Brown)
- Kyle Hierholzer

- Todd Lane (LSU)
- Marc Mangiacotti (Harvard)
- Kiamesha Otey (Richmond)
- Andrew Owusu
- Jeff Petersmeyer (Louisville)
- Dan Pfaff
- Boo Schexnayder (LSU)
- Lee Solomon
- Kebba Tolbert (Harvard)
- Mario Wilson (UVA)
“Beware of the myth of building a big base … always ask yourself … a base of WHAT?”
”Revel in the set up”

Rhythm and flow of training
“Develop an array of skills. It is not about mastery – but the struggle to get there”
PHYSICAL PERFORMANCE COMPONENTS
The Big Rocks

• Speed
• Strength
• Skill/Coordination
• Work Capacity
• Suppleness (Mobility)
• Balance in development of physical performance components is essential to long-term progress. These abilities are requisite and dependent upon each other.

• The training balance between various physical performance components need not be equal.
SPEED
• Acceleration
• Absolute Speed
• Speed Endurance

COORDINATION/SKILL
• Agility
• Mobility
• Balance
• Technical Execution

STRENGTH
• Absolute
• General
• Endurance
• Power
• Reactive
• Develop technique alongside the development of physical performance components.

• Identify skills/features the jump events have in common. Teach them and bring both to events in applicable form. Provide opportunities to learn and rehearse commonalities.
What Are The Features of the Horizontal Jumps?

- Approach
- Preparation
- Takeoff
- Flight
- Landing
In flight, the path of a body’s center of mass is predetermined...
Jump Skills

• Postural

• Impact/Contact

• Swinging Segments
HORIZONTAL JUMP FUNDAMENTALS

POSTURE
What Does Good Posture Look Like...

Jogging/Skipping?  Multithrow?
Static Flex?  Sprint Drills?
Dynamic Flex?  Hurdle Mobility?
General Strength?  Medicine Ball
Multijump?  Circuits?
Proper alignment of...

- Head/Neck
- Shoulders
- Lower Back
- Hip
- Knee
- Ankle

A.k.a. “Neutral"
HORIZONTAL JUMP FUNDAMENTALS

SWINGING SEGMENT USAGE
Oscillation

- Large, extended ROM
- Preservation of pelvic alignment (posture)
- Blocking
HORIZONTAL JUMP FUNDAMENTALS

TAKEOFF/CONTACT PATTERNS
Preparation

- Prerecruitment of thigh
- Ankle Dorsiflexed
- Heel Lead

Contact

- Flat
- Rotating shin while in support - heel to toe
- Foot bridges late in support phase
AMORTIZATION
A.K.A. YIELDING
A.K.A. ABSORB
SKIPS FOR HEIGHT

Teaching tool for: amortization; posture; swinging segments; long jump takeoff trajectory

Posture: Hips higher than knees – keeps the pelvis neutral

Takeoff/contact: vertical shin – vertical force; heel to toe

High takeoff trajectory; feel rise and fall of hips
SKIPS FOR DISTANCE

*Teaching tool for: rhythm; posture, triple jump take off trajectory; swinging segments*

Posture: Hips higher than knees – keeps the pelvis neutral

Swinging Segments: hands low; feet close to the ground

Flat, then slightly upward trajectories
CONTINUOUS TAKEOFFS

Teaching tool for: amortization; posture, long jump take off trajectory; swinging segments

Posture: Hips higher than knees – keeps the pelvis neutral

Preparation – Penultimate step

Vertical force generation
RUDIMENT HOPS

“A Jumping Battery” – Dan Pfaff

Double Foot Forward
Double Foot Backwards
Double Foot Lateral
Single Foot Forward L
Single Foot Forward R
Single Foot Backward L

Single Foot Backward R
Single Foot Lateral R
Single Foot Lateral L
Single Foot Medial R
Single Foot Medial L
Left, Left, Right, Right
SINGLE LEG FORWARD L
SINGLE LEG BACKWARD L
LEFT, LEFT, RIGHT, RIGHT
SINGLE LEG LATERAL R
PRESEASON TRAINING EXAMPLES
SEPTEMBER

TUESDAY (G)
- General Warm-Up; Descending
- Hurdle Mobility
- Tech - 3x30m Skips For Height; 3x30 Skips For Distance; 2x Continuous Takeoffs L; 2x Continuous Takeoffs R

THURSDAY (G)
- Repeat
OCTOBER

TUESDAY (G)

• Tech – 10-12x Long Jumps from 6-8 steps (SRJ’s)

• General Strength & Med Ball Routines

THURSDAY (G)

• Tech - 2x ea. LLL, RRR, RLRL, LLR, RRLL

• General Strength & Med Ball Routines
NOVEMBER & DECEMBER

TUESDAY (G)
• Tech – 6-10x Long Jumps from 10-12 total steps

FRIDAY (N)
• Tech – 10-12x Triple Jumps from 6-8 total steps
“A flaw in an athlete’s technical approach to their event cannot be considered to be corrected until the athlete can clearly tell the difference between correct and faulty execution” – Frank Dick

• Summary
• Average
• Bandwith
• Self-Selected
THANK YOU!

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