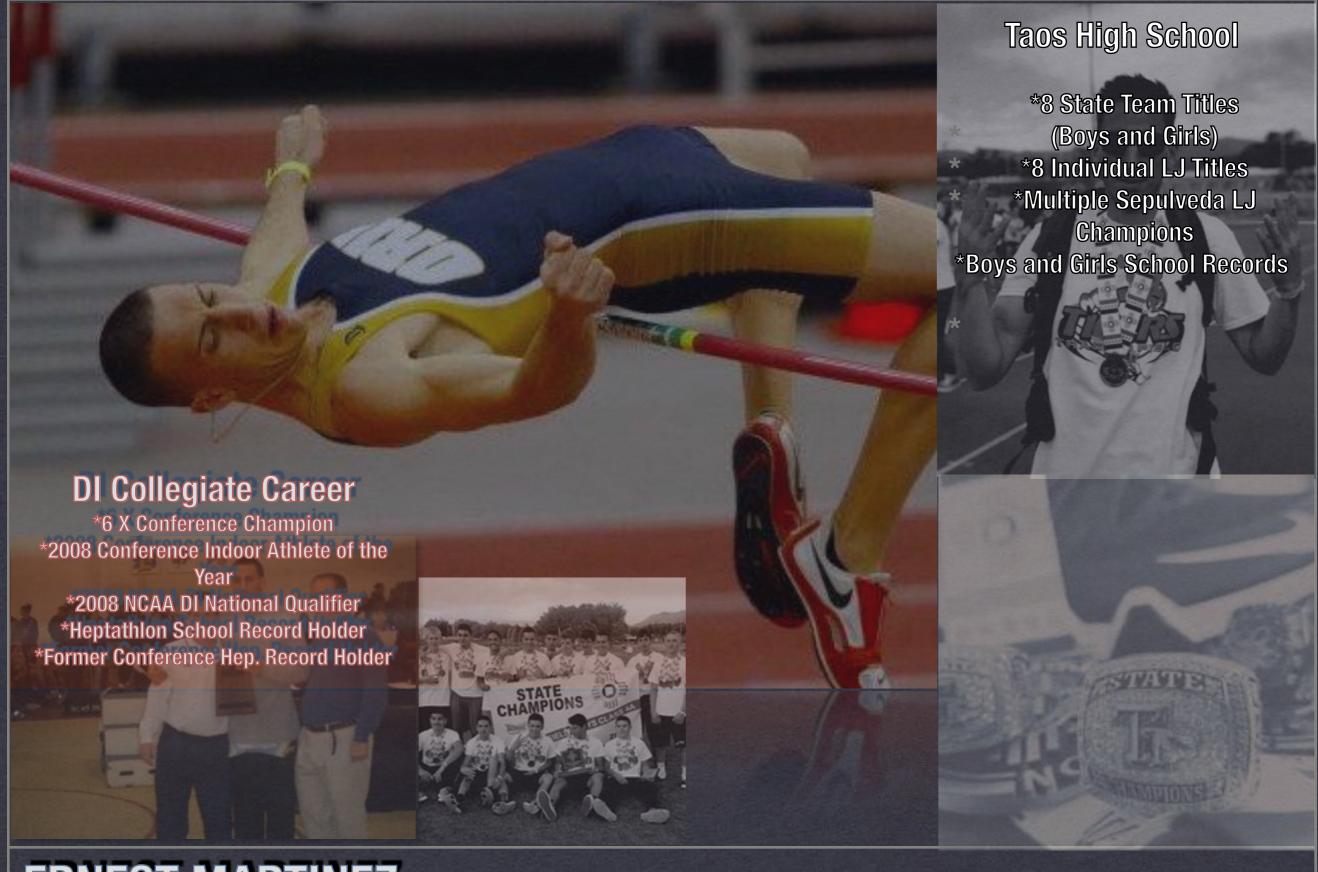


LONG JUMP

PHYSICALLY PREPARED *** TECHNICALLY SOUND *** MENTALLY STRONG



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Event Breakdown

Long Jump Components

Physical
Technical
Mental

* Although the physical component will be covered briefly, the technical and mental aspects will be highlighted

PHYSICAL COMPONENT

CREATING AN ATHLETE VS FINDING ONE?

WHAT TO LOOK FOR: (IDEALS)

OBVIOUS

- A. FAST, POWERFUL, GOOD SPRINT MECHANICS, NATURAL JUMPING ABILITY
- B. NORMALLY SUCCESSFUL, PHYSICAL SPECIMENS

UNDERRATED

- A. COORDINATED, GOOD BODY AWARENESS, FLEXIBLE
- B. WANTS TO DO IT!!



Athletes come is all shapes, sizes, and abilities. Individualized instruction! Mold them and create better athletes!

Physical Requirements for a Successful Long Jumper

- * Sprint Mechanics: Speed is paramount, emphasis on good sprint/ frontside mechanics. SPRINTER FIRST!
- * Strength: Explosive, raw power, exert force quickly, convert horizontal momentum into vertical lift
- * Dynamic Movement: Coordination, body awareness, "snappy"
- * Flexibility: Ability to perform necessary movements specific to LJ (hips, back, ankles, etc), Injury prevention!
- * Endurance: Handle the rigors of practice, strength endurance, jump endurance (ability to execute multiple attempts at peak form)



PHYSICAL DEVELOPMENT:

Speed Development and Running Mechanics

Follows direct philosophy of a successful sprint program

Event Specific Plyometrics

- Varies by athlete, ability, proficiency, periodization, etc
- * Lower Impact ——-> Higher Demand
- * Bilateral ——-> Unilateral
- * Relevant to athlete!
- * In-depth look during TJ session

Emphasis on:

- Executing sprint drills correctly
- Improving sprint mechanics (proper foot contact, dorsiflexion, efficiency, hip position, etc)
- Creating pure speed (MVR'S, more horizontal velocity = higher ceiling)

Examples:

- Multi-jump circuits and Hurdle Hops
- Box Jumps and Depth Drops
- Bounding

CONTACT COUNT!

TECHNICAL COMPONENT

***PHILOSOPHY: NOT ONLY KNOWING WHAT TO SAY, BUT WHEN TO SAY IT**



- * Drive Phase
- * Transition
- * Take-off/Plant
- * Landing

Must build from one phase to the next!!!!!!

Long Jump errors are often times misdiagnosed.

It can be easy for an untrained eye to label a problem as a take-off issue, but is in fact, a deficiency early in the approach.

INITIAL SET-UP:

Will vary with athlete, ability, speed, strength, time of year, and also between girls and boys

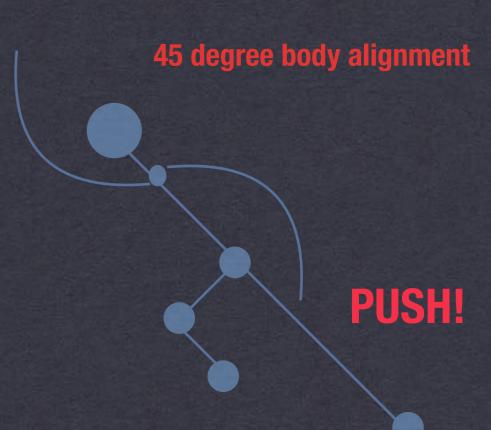
Concepts:

- ** Take off leg choice
- ** Approach length (6,7,8,9 strides?)
- * Mark and mid-mark location

DRIVE PHASE:

The Skinny

- * Consistency, consistency consistency!!
- * Drive phase acceleration is identical to proper sprint acceleration
- * 1st 4-6 steps are POWERFUL, not necessarily quick (displacement vs frequency)
- * "Big", long arms transference to lower limbs
- * Roll in? Step in? Skip in?



Phase-Centric Tools

- Sleds, Bungee-runs, "Bullet-Belt", parachutes (emphasis on driving out, correct body angles, slows down timing, etc)
- * Acceleration focused wicket drills
- Powercleans (reinforces movements critical to sprint acceleration)
- Medballs throws emphasizing triple-extension (forward granny toss, reverse overhead)

TRANSITION:

The Skinny

- * Build off well developed drive phase
- Drive phase acceleration posture transition (gradually rise)
- **Execution of proper sprint mechanics** (proper foot contact, location in respect to hips, vertical force being applied, ETC)
- **Goal to achieve MAXIMUM VELOCITY** (that can be maintained through takeoff)

Phase-Centric Tools

- * Maximum Velocity Runs
- Full Run-throughs
 - A. Develops runway rhythm
 - B. Locks in approach.....CONSISTENCY
 - C. On the track vs runway to eliminate focus on all outside POE
- * Wickets
- Pure speed development/speed endurance (congruent with your sprint program)

TAKE OFF/PLANT:

THE SKINNY

Long Jump Specific

***** Penultimate

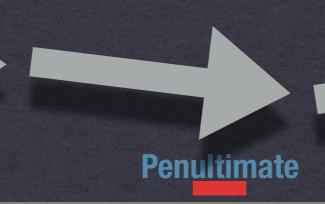
- Dorsiflexed foot contact (heel leads a "quiet" step)
- Flexed ankle/knee (bridging of the ankle —-> proper hip flexor extension ——> strong reflexive swing)
- Slight lowering of the hips (down and forward, conserve horizontal velocity)
- DO NOT OVER DO IT......It is subtle, and should not be a speed killer

* Final

- DO NOT REACH!!! (Excessive front side extension kills horizontal velocity!!)
- Shorter step leading into plant allows hips to rise and (Flat contact with low heel recovery)
- Getting your foot down (APPLYING FORCE) VS Swiping (contradictory movement)
- Stiff leg, slightly flexed at Take-Off
- Tall, perpendicular posture (not "squatty" or leaning back) Where are our eyes? Chest??
- Proper free-leg swing & knee drive
- Blocking Principles (free limb speed, impulse creation, transferring momentum)

HIP HEIGHT

PUSH INTO PENULTIMATE





Take-Off Centric Tools

Skip/Gallop Drills

Foot Contact, posture, arm action, penultimate rhythm

Split Jumps

Take off centered without landing emphasis

Short Runs

Increased reps, slightly slower execution speed, lower impact forces

Full Approach Pop-Ups

Run continuity, "feel" of full approach, foot placement

Low Box Drills

Penultimate step drill, flexion to extension development



FLIGHT:

MUCH OF OUTCOME IS PREDETERMINED COACHES OFTEN OVEREMPHASIZE THE IMPORTANCE OF FLIGHT MECHANICS

KEY CONCEPTS

- Posture is primary!! (Where is your torso? Eyes? Chest?)
- * Hitch, Hang, Flyer (athlete predisposition)
- Appropriate arm action
- Cueing knees to chest vs chest to knees
- * Advancing feet = Extension
- * Arm sweep with conservation of posture (sweep vs REACH)

LANDING GEAR

- * After full-extension, heels to pit, hips to heels, feet out the back
- Off center approach
- * Errors: results of deficiencies in the earlier phases

Flight Centric Tools

Standing Long Jump

Short Run Box Jumps

Chair Drill

Arm Drills

BEING A TECHNICIAN

***NOT ONLY YOUR KNOWLEDGE, BUT KNOWING WHEN/HOW TO DELIVER IT**











- * REGURGITATION OF INFORMATION
- **EXCESSIVE TALKING POINTS/KEYWORDS**
- **MEET OR PRACTICE = SPECIFIC TASK IDENTIFICATION**
- *** BUILDING AS THE YEAR PROGRESSES**
- * AROUSAL MANAGEMENT

MENTAL COMPONENT

Balanced Coaching

- * ATHLETE, TIME, SITUATION APPROPRIATE COACHING
- * ATHLETES HAVE EXCESSIVE ACCESS TO THE COMPLETE SCOPE OF THEIR EVENT
- * INCORRECT MEET/PRACTICE STRUCTURE CAN BE EXTREMELY DETRIMENTAL

Mental Blocks

Psyched out/lack of confidence
Fear of regression
Confusion
Scratches - Way behind the board

Plateaus

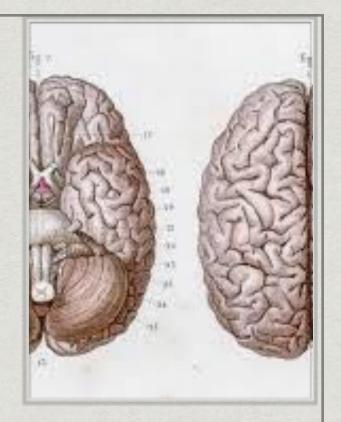
Training does not promote growth
Lack of physical/technical gains
Portrayal that athlete is at their "limit"

Complacency

Known outcome/lack of motivation Meets feel like practices, championship meets feel like early season meets

Injury and Overuse

Overtraining certain muscle groups
Fixation on personal bests/qualifying, resulting in overexertion
Emphasis on wrong concepts



MENTAL COMPONENT

Setting your program up for success

- Growth/improvement based ideology VS results based ideology
- Mentally center your athletes with clear, appropriately designed meet/practice objectives

Athletes are predisposed to gauge results strictly on PR's

- Know your athletes(body language, strengths, weaknesses, stressors, motivators)
- High level of Attention/Support ——> Independence
- Prepare your athlete MENTALLY!

Bad weather, long/short wait, jumping right after 400 as prep for state, 3rd attempt jumps, step correction, proper warm-up time, flight management, start marks, coach not there, mark blows away, etc.

SESSION EXAMPLES:

Emphasis on specific task & mental component as opposed to PR's/jumping "Far"



Goal: Consistency runs

Athlete measures full approach out on the track instead of the runway. After appropriate warm up run throughs with tape down, coach removes large take off reference point. Athlete is then instructed to complete 4-6 or 6-8 full run throughs with pop-ups. Coach will make small visual marks that only he/she can see. After all runthroughs are complete, debrief athlete with the range of their take-off points.

Benefits: Re-enforces run consistency, decreases ability to track board and self adjust, develops high level of belief/trust in their approach.



Goal: Early season expectations

Athlete is attending the first meet of her season. Although she ended the year with a 16 step approach, she will only be allowed to run from her short run approach similar to last year. She is frustrated because she wants to PR/qualify/win this week.

Coach sets appropriate expectations that are improvement based and periodization correct. Draws growth comparison from early last year vs championship season last year.

Benefits: Resets focus to technical execution as opposed to results based. Prevents against over-exertion and early injury. Athlete has increased chance of properly executing correct technique.



Goal: Championship recovery

Long/Triple jumper is normally moderately sore on the day after team meets. Being a talented but younger athlete, he is questioning his ability to complete all his events on back to back days at state. Coach calls for an individual Saturday practice following the meet on Friday night. After a demanding meet that included triple jump, the athlete is given a controlled long jump practice. Although sore, the athlete is given the chance to work through the tightness through the use of specific warm-ups and treatment.

Benefits: Able to find specific strategies to prepare properly, mentally gains confidence in ability to perform. If athlete is neglecting their post-meet cooldown & treatment, it is the opportunity to show its value (wake-up call).