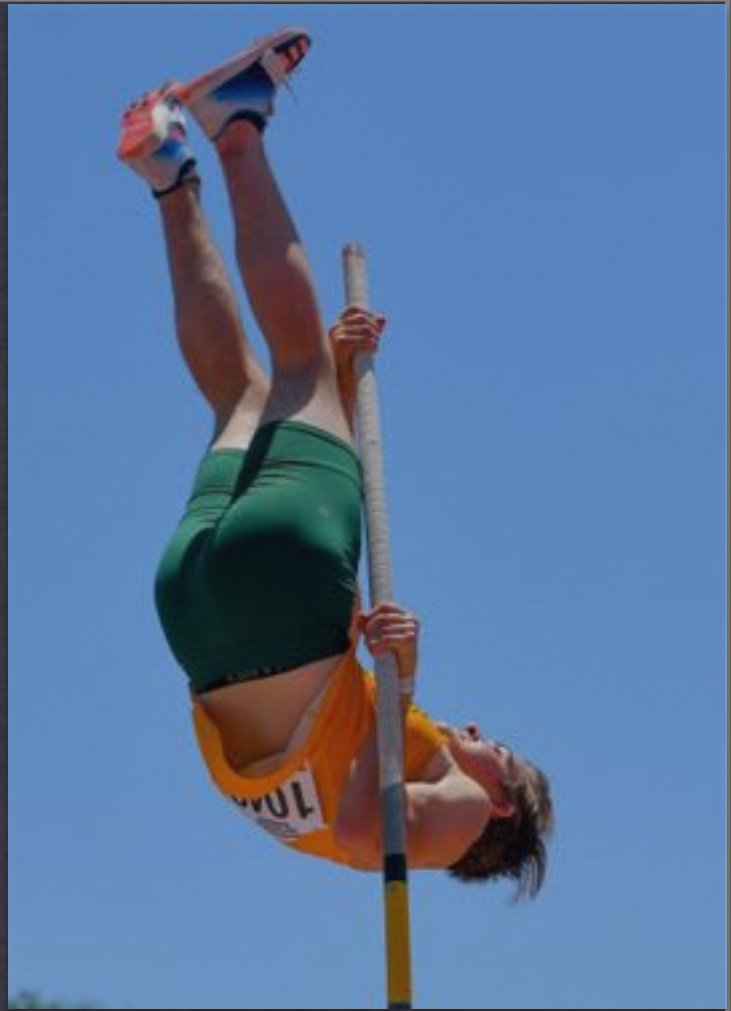


# Pole Vault

**COACHING A COMPLETE ATHLETE**



A background image showing a large crowd of people silhouetted against a warm, orange-hued sky at dusk or dawn. The scene appears to be an outdoor event or gathering, possibly at a school or sports venue. The crowd is dense and extends across the width of the image. In the upper right corner, there is a small white icon consisting of three horizontal lines, resembling a menu or list symbol.

Ernest Martinez

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- Head Coach - Los Alamos High School  
Girls (Previously at Taos High School)  
*10 NMAA State team titles*  
*3 Pole vault State Champions*  
*3 Vault School Records*
- Taos High School Grad and Athlete
- NCAA DIV-1 Collegiate Career  
*6 X Individual Conference Champion*  
*Conference/School record holder*  
*2008 Conference Indoor Athlete of the Year*  
*NCAA DI National Qualifier (Heptathlon)*

# Keeping your athletes safe!

- **Extremely fun, but dangerous event**
- **Equipment safety**
  - Poles (damaged, old, inappropriate, transportation)
  - Mats (damaged, weathered, too small, incorrectly set up)
  - Standards and Box (incorrect settings, wet/icy box)
  - Runway (wet, damaged, slippery, uneven)
  - Hazards (items near PV area)
- **Teaching safety**
  - Teaching skills progressively
  - Starting small and moving forward based on proficiency
  - Emphasis on clearing bars over skill??
  - Knowing the effects of fatigue on safety
  - Being an expert in what you are teaching (poles, flex #, standards, etc)
  - Tying into the PV community (resources, mentorship, equipment usage, etc)



# Event Breakdown

- Pole Vault Components

- A. Physical

- B. Technical

- C. Mental

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

# PHYSICAL COMPONENT

**\*\*CREATING AN ATHLETE VS FINDING ONE?\*\***

## OBVIOUS

TALL, ATHLETIC, POWERFUL, FAST, NATURAL JUMPING ABILITY,  
GYMNASTS, PHYSICAL SPECIMENS

## UNDERRATED

- COORDINATED, GOOD BODY AWARENESS, FLEXIBLE
- WANTS TO DO IT!
- COMMITTED



**Athletes come in all shapes, sizes, and abilities.  
Your job is to mold them and create a better athlete.**

# Physical Requirements of a Pole Vaulter

- **Strength:** Raw power, ability to exert force, explosive
- **Dynamic Movement:** Coordination, body awareness, “snappy”
- **Flexibility:** Ability to perform PV specific movements
- **Sprint Mechanics:** Efficient runner (form), foot/ground contact, being fast
- **Endurance:** Handle the rigors of practice, strength endurance, jump endurance (ability to execute multiple attempts at peak form)

# TECHNICAL COMPONENT

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



**Being sound in all three phases:**

- . Approach**
- . Take-off/Plant**
- . “Flight”**

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

**Pole Vault errors are often times misdiagnosed.  
It can be easy for an untrained eye to label a problem as a 3rd phase or take-off problem, but is  
in fact an approach deficiency.**

# APPROACH SET-UP:

Varies with athlete, pole, body type, ability, speed, strength, and also between girls and boys

PV approaches generally range anywhere between 10 and 16 steps.

## Concepts:

Periodization

Pop-up, short run, fulls

Measuring from box

Take off location/pole length

Acceleration dynamics (power to speed)





# APPROACH: FULL

## Setting up success

- Consistent, powerful steps out of the back (first 4)
- Overcome inertia, build horizontal velocity
- Consistent, rhythmic, controlled, “bouncy”
- Shoulders square with direction of travel
- Efficient carry
- Changing posture
- Dropping of the pole

### Common Errors:

- \*Sprinting immediately
- \*Hunched, forced posture
- \*Small, variable steps
- \* Early deceleration

# Approach Specific Drills

- **Marching**
  - Stationary (with/without pole)
  - Walking
- **Pole Runs**
  - Track, runway, indoors
  - Working on timing of the pole drop
- **Full run-throughs (without plant)**
- **MVR's/Wickets**
  - Rhythm drills
  - With/without poles
  - Sprint mechanics

# PLANT/TAKEOFF:

## PLANT KEY CONCEPTS

- Correct pole drop
- Left and Right arm paths
- Moving the plant EARLY
- Tall plant (pole to ground angle)
- High hand

Safety is a large concern!

## TAKE OFF/DRIVE PHASE

- Vertical component to the take-off: JUMP
- Take off foot under top hand (UNDER VS OUT)
- Drive with the knee
- Lead with the chest (stretch reflex)
- Drive top arm up, not back (Pushes pole in, creates space)

# Plant/takeoff Specific Drills

- Pole run targets (Tape box or rag)
- Sand pit drills
- Single arms (2, 4, and 6 step)
- Pop-ups
  - A. Pole push
  - B. Regulars
  - C. To bottom
  - D. To Back (standard, with turn)
- PVC pole bends
- Wall drills



# FLIGHT:

- HOPEFULLY WE HAVE ARRIVED TO THIS POINT  
TECHNICALLY SOUND AND IN A POSITION TO  
SUCCEED

## Very Basic Flight Concepts

- Top arm pushing action creates a long, fast swing
- Keep constant pressure on top arm
- Rowing initiates rock back
- Bottom arm breaks through & wrist comes to pole
- Top arm continues pushing through to mid-section
- Bottom shoulder turns & drops towards ground
- Lead leg knee straightens and turns over opposite foot
- Top hand pull moves to a push as turn is completed: **KEEP PRESSURE**
- Push pole to finish!

# Flight Specific Drills

- Bar work (Leg swings, Bubka's, extensions)
- Rope swings
- Cart drills (floor variation)
- Rock backs
- Pole-vault specific apparatus



- Inappropriate pole, grip height
  - Severely under/out
  - Wrong take-off leg
  - Bent/squatty take off
- Releasing top hand pressure
  - Getting “back” too early
    - Flagging
    - “Reverse high-jump”
    - No pole push

## \*Common Errors\*

# 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**  
**DEMONSTRATED PROFICIENCY EMPHASIS**  
**HABIT/REPEATABILITY BUILDING BLOCKS**  
**VIDEO TAPE!!**

# MENTAL COMPONENT

## VAULT AS A CHALLENGE OF FAILURE

- . VERTICAL JUMPS ALWAYS END IN “FAILURE”
- . 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 at certain heights
  - Fear of regression
  - Confusion
  - Cannot get off the ground

- **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 particular bar clearance, resulting in overexertion
  - Emphasis on wrong concepts





# MENTAL COMPONENT

## Setting your VAULT program up for success

- Growth/improvement based ideology VS results based ideology
- Mentally center your athletes with clear, appropriately designed meet/practice objectives
- 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, high opening bars, equipment management, warm-up time, jumping clean, start marks, coach not there, mark blows away, etc.



Athletes are predisposed to gauge results strictly on PR's