Developing the Jumps from the Ground Up

Laura Gustafson

My Background

Majority of my experience has taken place a t NCAA DII institutions.

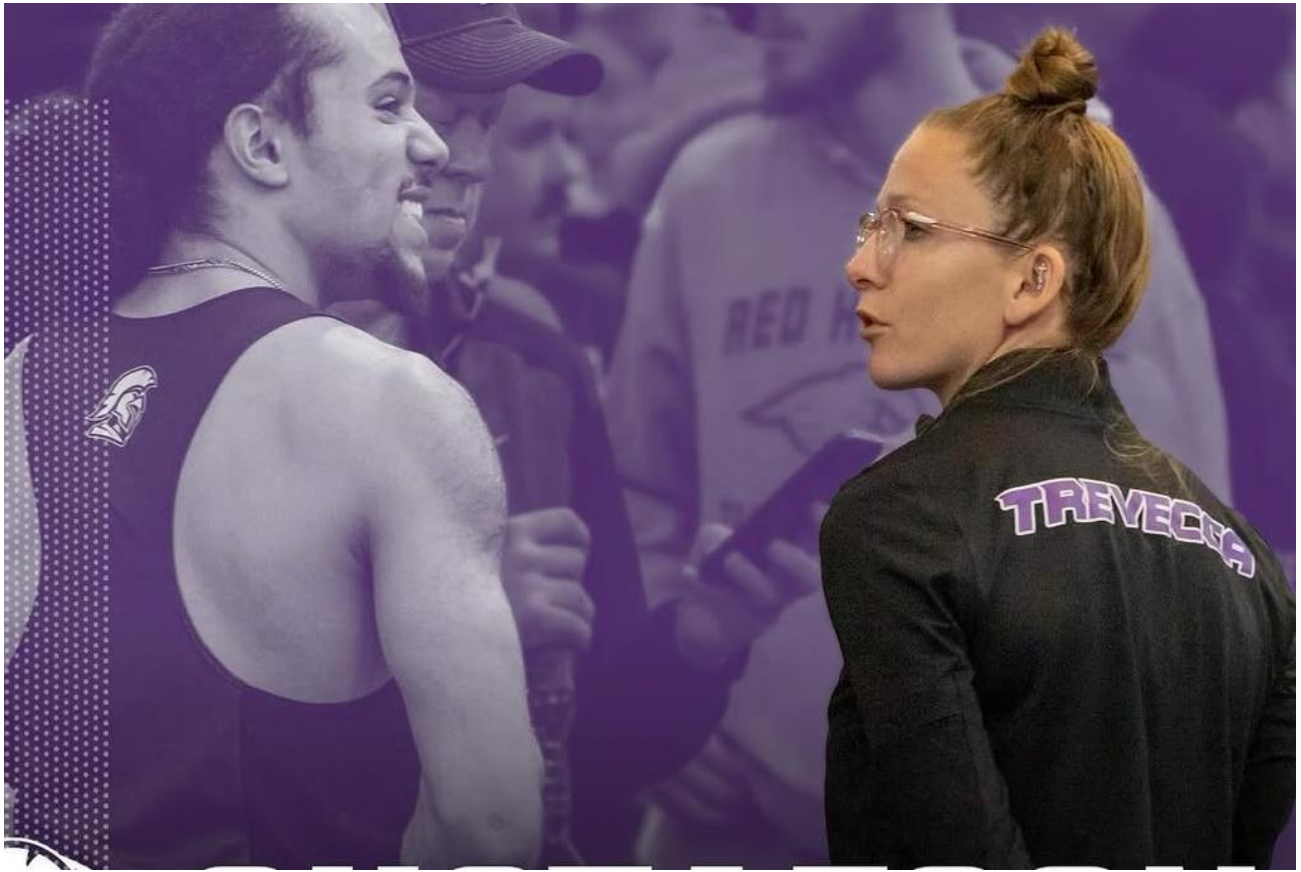
CCU saw 2 NCAA Qualifiers

20 school records, numerous PBs

TNU saw 8 NCAA Qualifiers

32 school records, numerous PBs

Unique backgrounds/relationships with track and field.



Nothing happens in the air that is not initiated on the ground

Dan Pfaff

We're not birds, we're land animals. Any movement needs to begin on the ground.

Unknown

Influences

Dan Pfaff

Boo Schexnayder

The athletes I've coached that have challenged me

What We Will Cover

1. Developing Consistency on the Runway
2. Set Up the Take Off
3. Take Off
4. Troubleshooting Common Errors
5. Q&A

Developing Consistency on the Runway

Finding Your Mark

- ❏ 6-8 Runs
- ❏ Average those marks
- ❏ That’s your starting point-adjust accordingly

Developing Consistency on the Runway

Maximum Controllable Speed

Developing Consistency on the Runway

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Developing Consistency on the Runway

Maximum Controllable Speed

- It's a different task
  - The long jump is a track and field event that requires competitors to sprint along a runway until they reach a take-off board. From here, they jump as far as possible into a sandpit (World Athletics)
- Find the maximum amount of speed the athlete can control into a coordinated take off
  - That speed will change over the course of a season and from season to season as they develop

Developing Consistency on the Runway

The Start

- Still requires the same elements of a sprint start
  - Large amplitudes of motion
  - Shin, hip, body angles still need to fall into the same constraints
  - Task is the same - changing a stationary body into motion rather rapidly
  - Progression to upright sprinting
- Many different methods
  - For consistency a standing start is preferred

Developing Consistency on the Runway

The Start

Developing Consistency on the Runway

Repetition, Repetition, Repetition

- Run throughs Vs. Pop Ups
  - What is the goal?
- Develop Checkpoints
  - Where an athlete is at their “mid” tells you a lot about what they need to change in their next approach
  - “Errors in accuracy usually results from errors in execution”

Setting Up the Take Off

Penultimate Step

- Lowering center of mass is necessary
- Contact Should be flat
- Only slightly in front of COM
- For novice jumpers the flat nature of the penultimate step may produce enough lowering
- Hips should move past foot during support phase
- Poor swing leg mechanics is typically related to poor penultimate step mechanics

Setting Up the Take Off

Penultimate Step

The Take Off

- Coach the take off as a continuation of the run
- Take off step is flat and only slightly in front of the center of mass
  - Take off step moves past the penultimate step at a lower recovery height
  - Too far in front creates braking forces

Common Errors

And How to Fix Them

- Overemphasis of lowering at Penultimate
  - Excessive deceleration
  - Coach the flat foot contact
- Slowing down into the board
  - Too long of an approach-deceleration
  - Too much speed - cannot control it into a coordinated jump

Common Errors

Don’t use a cookie cutter approach

Every athlete is trying to solve the same biomechanical problem with different puzzle pieces

Questions?