

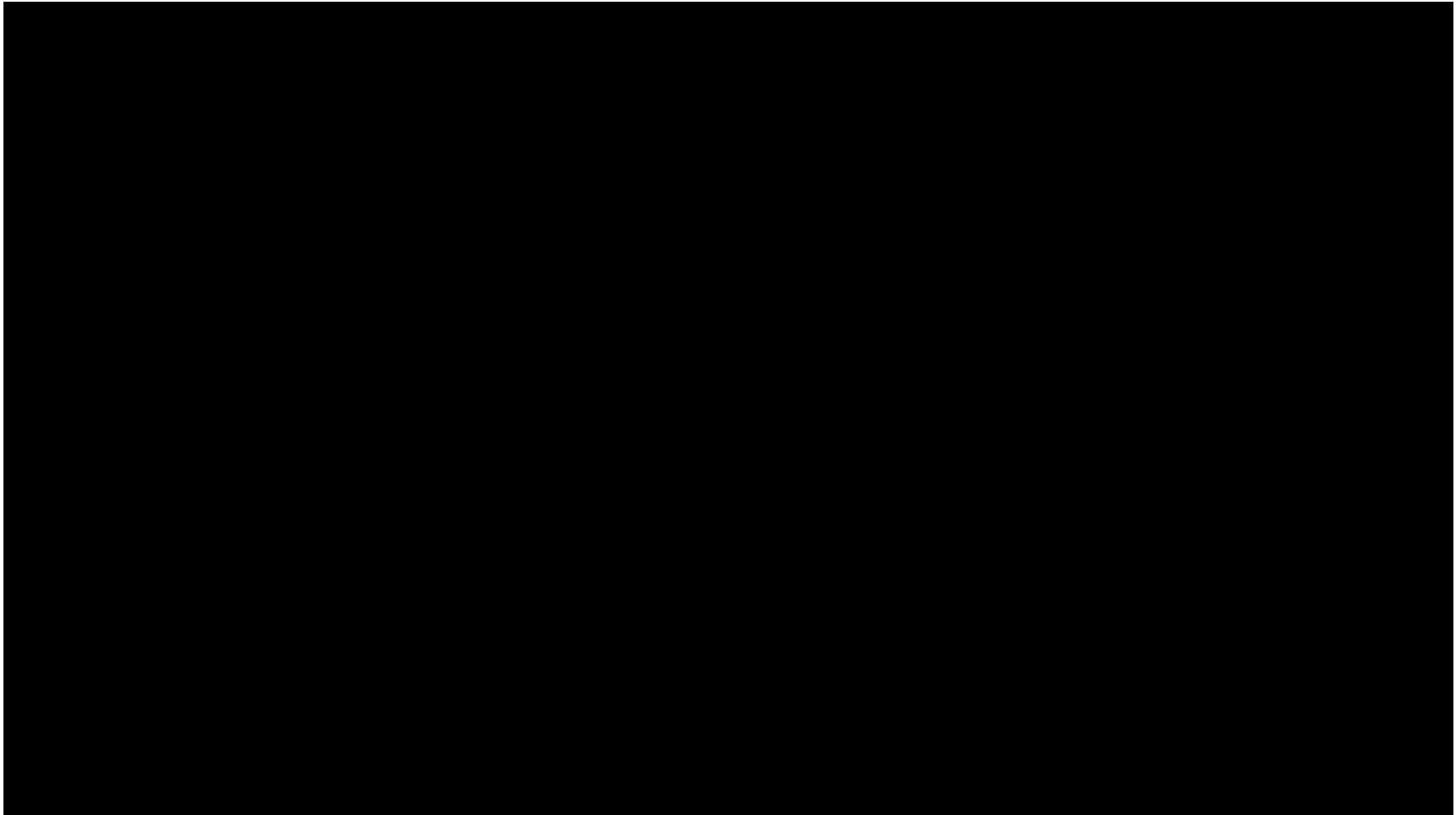


# Hitting Big Heights

**Advanced Concepts in the Fosbury Flop**  
**Nike Track Clinic – Portland, Oregon**  
**David Turnbull**  
**Summit High School, Bend Oregon**

**“The closest thing to flying is the high jump.”**

# Big Heights. Coaching or just a good athlete?



# Advanced Coaches, Advanced Thinking

Session designed for experienced high jump coaches

Refinement, efficiency, and performance optimization

Details that separate good from elite

# Modern High Jump Demands



Higher controlled approach velocities



Efficient horizontal-to-vertical force conversion



Precision and rhythm over brute strength



# Speed Is the Foundation



Approach velocity  
correlates strongly  
with clearance  
height



Speed must be  
controlled and  
repeatable



Arrive fast, tall, and  
composed

# The Approach as a System

Penultimate mechanics prepare vertical impulse

Curve consistency over step-count obsession

Posture governs center of mass behavior

The 3 “P”s  
Posture  
Predicts  
Performance

# Penultimate & Takeoff Micro-Details

Penultimate lowers COM without deceleration

Fast, stiff, active takeoff foot

Impulse comes from position, not effort

# Converting Speed to Lift

Optimal takeoff angles are athlete-specific

Short ground contact time is critical

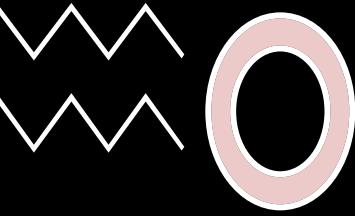
Tall posture preserves force direction

# Managing Rotation Efficiently

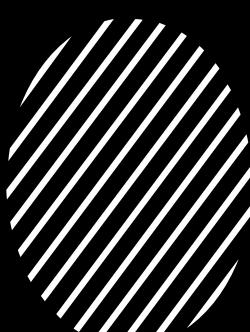
Rotation created by approach geometry

Lead arm and free leg guide rotation

Forced rotation reduces vertical impulse



# Bar Clearance Efficiency



Clearance quality reflects takeoff execution

Head and shoulders dictate bar trajectory

Elite jumpers wait for the bar



# Why Jumpers Plateau

Inconsistent  
approach  
rhythm

Loss of  
posture under  
pressure

Over-coaching  
technical  
adjustments

# Practice Design for Big Heights

1

Prioritize  
quality over  
quantity

2

Train at  
competition-  
relevant speeds

3

Protect CNS  
freshness

# Coaching on Meet Day

Fewer cues, stronger language

Trust the approach and rhythm

Protect athlete confidence

# The Coach's Eye

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Posture at  
touchdown

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Curve integrity  
into takeoff

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Takeoff foot speed  
and stiffness

## Final Thought

Big heights come from clarity, not complexity

Coach the environment as much as the movement

When it aligns, the athlete flies

Thank You

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## Questions & Discussion



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