Talent Identification and Development in the Women’s Hammer Throw

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University of Minnesota Women’s Track and Field

Background

- Shot Put and Discus Thrower at the University of Minnesota 2003-08
- Throws, Combined Events and Strength Coach at the University of Wisconsin-River Falls 2008-11
- Throws Coach at the University of North Dakota 2011-13
- Throws and High Jump Coach at the University of Minnesota (Women Only) 2013-Present
- Field Events Education Completed
  - USAJF Level 2 Jumps
  - USAJF Emerging Elite Throws Coach
  - USAJF Level 3 Throws
  - IAAF Level 5 Throws
  - USTFCCCA Certified Throws Specialist
  - USTFCCCA Master Coach Shot/Discus, Hammer and Javelin (In Progress)
Hammer Coaching Influences

- Lynden Reder – Former U of MN Men’s Coach
- Matt Conly – Current U of MN Men’s Coach
- Jud Logan – Hammer Skills and Drills Video
- Kevin McMahon – USATF Emerging Elite Clinic

DISCLAIMER

- I am still learning and adapting my approach
- I am lucky to have another great throws coach down the hall
- All the drills are being performed by first year throwers, so they are real-world examples not perfect
- This approach may not work for every coach
- This presentation is about development not fine tuning
**Minnesota Program Expectations/Goals**

- We are a conference driven team
- Our program is judged on Big Ten meet results
- Only division one institution in Minnesota
  - We have tuition reciprocity with WI, ND and SD
- Our focus is on depth and development
  - Large roster, 80-90 girls, 14 throwers, 2 high jumpers, 6 heptathletes
  - Mix of international and local athletes
  - I am allowed to redshirt almost every freshman

**Minnesota Hammer/Weight Success since 2014**

- Nine women over 19m in Weight, 24 Big Ten points, 0 NCAA qualifiers
  - Current roster includes 5 women with PRs of 19.34, 19.42, 19.42, 20.94 and 21.20 (22.70 at previous institution)
- Seven women over 60m in Hammer, 47 Big Ten points, 15 NCAA preliminary entries, 5 NCAA finalists
  - Current roster includes 5 women with PRs of 54.18, 58.87, 60.86, 61.66, and 64.01 (____=PRs from previous institution)
  - 6 of the 7 had zero high school experience, Agnes threw hammer in one meet, 38m

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*At the 2017 Longhorn Invite on 4/28/2017*
Talent Identification

EVERYONE!!
- No set type of athlete
  - Throwers, Figure Skaters, Triple Jumpers, Sprinters
- Multi-sport athletes
- Intelligent
  - Has to be able to handle stress of school plus large training load
- Work ethic
  - Lazy talented people can throw the weight far, but the hammer takes work (IMO)
- Be patient
  - Skill acquisition is different for every person

Athlete Example & Background - Devin Stanford

- 4% Scholarship
  - Milwaukee Lutheran, WI
- Multi-sport Athlete
  - Basketball, volleyball and track
  - 139"9" disc, 40"7" shot
  - Long arms, powerful, explosive, durable
- Discus, Weight and Hammer progressions
  - 42.50, 14.26 and 38.61 in 2011 Prior to my arrival
  - 46.97, 16.57 and 51.80 in 2012 Prior to my arrival
  - 51.93, 18.32 and 57.63 in 2013 Prior to my arrival
  - 51.56, 19.34 and 60.44 in 2014
  - 54.24, 20.61 and 61.82 in 2015
Athlete Example & Background - Lyndsey Thorpe

- Walk On
  - Stanley-Boyd, WI
- Multi-sport athlete
  - Basketball, volleyball and track
  - 45'3" shot 126'2" disc
  - Short levers, powerful
- Weight and Hammer progression
  - N/A and 43.64 in 2012 Prior to my arrival
  - 14.99 and 53.92 in 2013 Prior to my arrival
  - 17.40 and 57.87 in 2014
  - 19.41 and 59.78 in 2015
  - 19.72 and 63.30 in 2016

Athlete Example & Background - Temi Ogunrinde

- Walk On
  - Cottage Grove, MN
- Multi-sport athlete
  - Basketball, soccer and track
  - 57.1 400m (State 3rd Place)
  - No throwing experience
  - Short, powerful, FAST!!
- Weight and Hammer progression
  - Ran 42.51 for the indoor 300m December of 2014
    - transitioned full time to hammer in January of 2015
  - 14.78 and 49.86 in 2015
  - 16.23 and 52.58 in 2016
  - 19.34 and 64.01 in 2017
The Process

- No secrets...
- Take notes – figure out what works
  - Implements, drills, lifts and timing
- Hard work
  - Coach and athlete
- Throw as much as possible
  - SAFETY EXCEPTION!!
- Consistent quality instruction
  - Watch as many throws as you possibly can
- Video review
  - Outside of practice
- Special strength
  - When technique degrades

Nothing in this world can take the place of persistence. Talent will not nothing is more common than unsuccessful people with talent. Genius will not unrewarded genius is almost a proverb. Education will not the world is full of educated failures. Persistence and determination alone are omnipotent.

- Calvin Coolidge

Drill Progression – Footwork – Hammer stance and turn to 90

- Heal – Toe
- Posture
  - Chin up (eyes above the ball)
  - Hips pushed forward towards knees
- Slight knee bend
- Long loose shoulders (elbows down)
  - PVC or broom handle
- Push/Turn right foot and hip into left knee
  - Shoulders and head follow
Drill Progression – Footwork – 180

- Starts the same
- Keep feet grounded
- Turn right foot as far as possible
  - Past left
- Maintain posture
  - Belly button leads the chin

Drill Progression – Footwork – Skip In

- Continued focus on posture
  - Chest up
  - Hips in, between feet
- Skip right leg
  - Dorsiflex right foot
  - Lift knee/foot directly over left heel
- Drop left knee
- Land on balls of both feet
  - Cue stepping right foot on left toes
  - Weight 50/50
Drill Progression – Footwork – 270 + Back to 0

- Actively drop/slam left heel
- Push hands
  - Push hands away from chin for length, not away from hips
- Maintain posture
- Turn feet back to zero
- Tight knees

Drill Progression – Footwork – Putting It All Together

- Remove pauses
- Focus
  - Posture
  - Tight feet
  - Smooth
  - Balance
  - Level shoulders
  - Eyes/Chin up
Drill Progression – Walk Around

- Pick a spot on the ground
  - Crossed lines
- Flat Feet
  - Progress to heel-toe
- Posture Cues
  - Chin up
  - Hips forward
  - Relaxed shoulders
- Flat Orbit
- Use to build feel for the system
  - Connect to the ball

Drill Progression – Walk Around + Step to 180

- Same as walk-arounds but add...
  - A conscious dominant side step towards the middle of the sector
  - Slight displacement (6-8”)
  - Keep hips on top of both feet
  - Non-Dominant knee drops slightly to prevent rise, no change in hip height
- Repeat walk around then repeat step in
- Use to find direction within the system
Drill Progression – Walk Arounds With a Step Into Turns

- Walk around until you feel connection with the ball
- Step right at 180 to begin turns
- Gradual acceleration through push and counter
- Learn to keep connection and build speed
- Vary implement length and weight

Additional Drills – Walk Around into Over Turn Throws

- Once acceleration becomes more natural move onto releases/throws
- Starts slow and connected
  - Try to keep connection as speed is added
Additional Drills – Static Start into Over Turn Throws

- Work push of the ball and patience
- Eliminates winding
  - Easier to set up balance/feel the ball
- Single arm variations also productive

Repeat Entry Drills – 2 Winds, 1 Turn…Heel Entry

- Use to create consistency
- Focus on balance
- Teach a good catch posture/position
  - When to step in
  - Where to step in
  - How far to push
Repeat Entry Drills – 2 Winds, 1 Turn…Toe Entry

- Similar goals as heel entry
- Toe turn must step around further
- Entry speed is typically slower
  - How to adjust posture
- Catch can be on flat foot or ball of the foot
  - Weight should stay 50/50
  - No left foot slide!

Additional Drills – Turn Variations
Daily Practice Set Up

- General Warm Up
- Turns and Specific Warm Up
  - Anywhere from 20-100 turns depending on time of year and training age
- 12-30 Full Throws
  - Depending on time of year/training age/implement selection
  - 1 hour max of throwing
- Plyometrics, Sprints or Lifting
  - Something explosive every day
- Special Strength
  - 5-20 minutes

Weekly Practice Schedule

- Up to seven technical sessions each week
  - At least one session is drill review
  - 2-3 implements per session (heavy, light, and short heavy)
- Two or three lifts per week
  - Varies by time of year
  - Focus on stability, speed and posterior chain
- One or two plyometric sessions and one sprint workout
  - 10-20 minutes, complete recovery, combine both linear and vertical
- Special strength four or five times per week
  - LAST! Be creative, while embracing monotony
Long Term Development – Traditional Technical Changes

- Year 1 – 3 turn Hammer, 2 turn Weight
  - Several exceptions
- Year 2 – Toe & 2 or Toe & 3 Hammer, 3 Heels or Toe & 2 Weight
  - Exception was Lyndsey Thorpe, toe turn never worked, 4 heel turns
- Year 3 – Toe and 3 Hammer, whatever makes the weight go far
- Year 4 – Same as year three but expand your range of heavy and light
- Year 5 – Ask me next year…

Final Thoughts

- All of these drills can/should be reviewed/used by experienced throwers
- No substitute for throwing!
- Hammer is a learned skill
- THE BALL IS THE PROGRAM…Positions are only a start, orbit is the key!
- Be Patient
QUESTIONS???

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