"The little things in life matter. If you can't do the little things right, you can never do the big things right."

Admiral McRaven



Overview

- Philosophy / "Technical Model"
- Six stages of the rotational technique.
- Teaching progression.
- Specific drill exercises.

"Great leaders must walk the halls slowly." ~Dr. Maxwelll Philosophy /Model

- Balance
- Direction
- Rhythm
- Acceleration and Velocity
- Range of Motion

Balance

- The thrower must develop proper static as well as dynamic posture..
- Balance is crucial to the final result of the throw. Loss of balance generally inhibits the proper rhythmic acceleration of the thrower/implement system.
- Thus reducing the application of force during the delivery sequences.

Rhythm

- The thrower should learn, establish, and utilize, consistent rhythmic structures/patterns within the movements of the throwing actions.
- Using rhythmic and temporal cueing most athletes suffer a much lower rate of degradation due to stress (competition).
- Movement patterns learned and reinforced through repetitions.

Direction

- Efficiency / Consistency in setting up forces in the throwing direction will aid the development of the athletes spatial/kinesthetic awareness.
- The athlete should have a clear understanding of the desired direction. (both CMT and CMI)

Acceleration and Velocity

- The thrower should be encouraged to seek smooth and continuous acceleration. Acceleration is the rate of the positive change of velocity with respect to time.
- The final distance thrown is largely a result of the velocity of the implement at release.

Range of Motion

- The thrower should maximize use of the range of motion of involved lever/joints, appendages during the application of force on the implement.
- Generally, the longer the path of the application of force, the better the result.

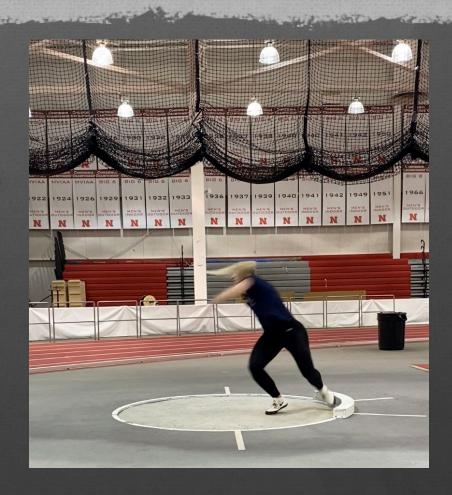
Perfection is not attainable, but if we chase perfection we can catch excellence." ~ Vince Lombardi

Teaching Progression

- Power position.
- Delivery drills.
- Stand throw progression.
- Wheel (half turn) progression.
- Linear drills (South African)
- Turn drills. (Full)

Power Position

- Left toe/right heel relationship
- Feet shoulder width apart/slightly narrower
- Upright position
- Head up
- Weight on back leg



"C" Position (Right Leg) Drill

- Emphasis is on right side rotation.
- Athlete assumes the power position.
 - Shoulders closed & weight back on right.
 - Right knee turns, left arm sweeps in direction of the throw.
 - Head and shoulders stays behind left.
 - Left foot comes off the ground.
- Drill should result in a high, but short throw.



Headache Drill

FOCUS OF NOT PULLING LEFT SHOULDER OFF.



Stand Throw Progression

- Stand throw with no reverse.
 - With hands on hip, PVC, Med ball, Shot put, DB
- Stand throw with a step out/over.
 - With hands on hip, PVC, Med ball, Shot put, DB
- Stand throw with a reverse.
 - With hands on hip, PVC, Med ball, Shot put, DB

Stand Throw - No Reverse

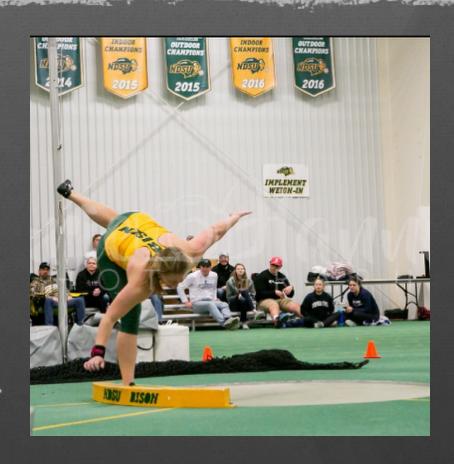
- Feet shoulder width facing 9 o' clock.
 - Correct heel/toe relationship.
- Torso facing 12 o' clock.
 - Weight on right side.
- Pivot simultaneously on both feet until shot is delivered.
 - Both feet face 6 o' clock at finish. (double Pivot)
- Emphasis is on ground reaction force.
 - "Grind the right foot." or "Crank the right knee in."
- No Reverse.
 - Stay into the shot!

Double Pivot MB Stand



Stand Throw - Reverse

- Repeat Non-Reverse steps.
- Head/shoulders over rear leg at release.
- Exchange feet.
- Upper body faces 3
 o' clock following
 release.
 - Foot is flat (heel down).
 - Left leg and arm long.



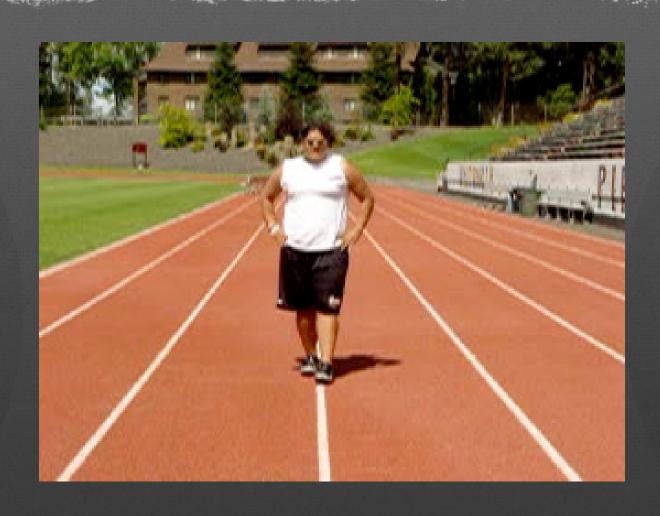
Wheel (Half Turn) Progression

- Wheel.
 - With hands on hip, PVC, Med Ball, Shot Put.
 - Active with left leg, heal tuck, keeping COM on right.
- Wheel (half turn) throw.
 - With hands on hip, PVC, Med Ball, Shot Put, DB.
- Line drill.
 - With hands on hip, PVC, Med Ball, Shot Put.

Line Pivot Drill

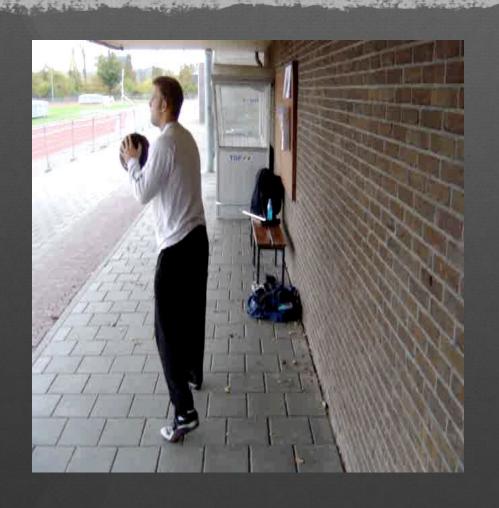
- On a line or balance beam, the thrower assumes a position on the line facing the direction of the throw with the left foot forward.
- Step forward with the right foot.
- Pivot on balls of the feet.
- Step back (in direction of the throw) with the left foot.
- Pivot on the balls of the feet.
- Repeat.

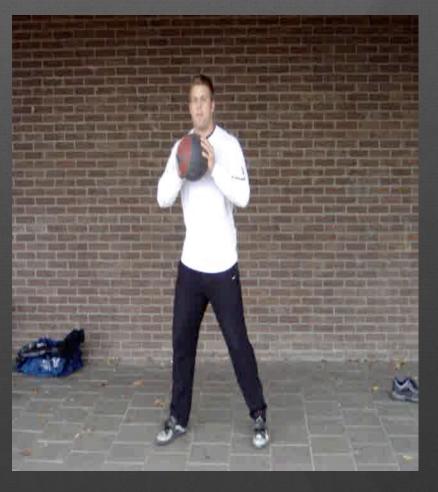
Line Pivot Drill



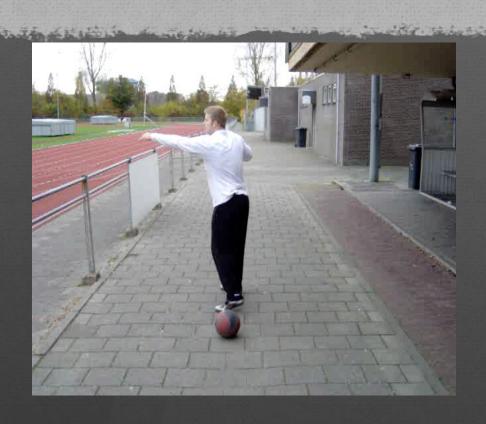
Turning Drills

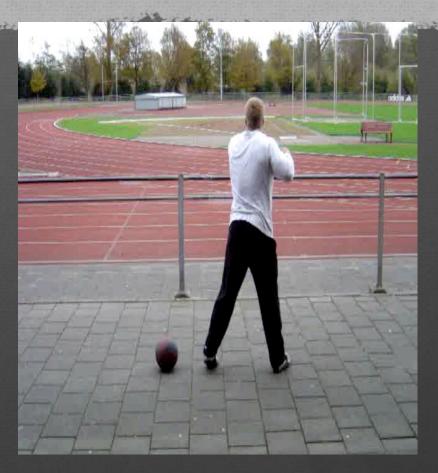
(push/catch rhythm, posture, direction)





Turning Drills sweep/direction





Turning Drills

wheel/balance right





Turning Drills

balance, posture, direction, rhythm





"Great vision without great people is irrelevant." Jim Collins" Six Stages of the Rotational Technique

- 1st Double Support
 - Set up
- 1st Single Support
 - Turn/Entry
- Non-Support
 - Flight Stage
- 2nd Single Support
 - Transition
- 2nd Double Support
 - Delivery
- Recovery



1st DOUBLE SUPPORT Set up

- Starting Position
 - Neutral alignment of pelvis allows the swing leg to move freely.
 - Feet shoulder width apart, straddling center line.
 - Shot high, resting on neck, thumb down.



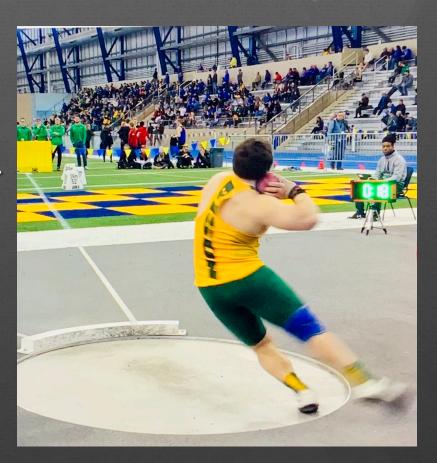
Entry

- Important to shift weight into left leg.
 - Armpit over left knee.
- Begin the entry by rotating on the ball of the left foot, opening of hip, pushing knee over toe.
- Rotate upper and lower body as a unit.



1st Single Support - Sweep

- Long left arm.
- Keep shoulders level.
- Body drops and left knee/ shin angle bends.
- Right leg sweeps from inside the leg not foot.
- Left foot drives to right sector line, but should not pass the middle of the sector.



1st Single Support - Drive Phase

- The right leg drives from outside into the center of the circle.
- Right knee lifts, foot comes under the knee.
- The action of stopping the left foot rotation along with the drive of the right leg creates separation.(don't turn off left)
- The bend of the left knee is maintained to aid in landing the left foot at the front quickly.



NON SUPPORT/FLIGHT

- Left foot leaves the rear of the circle once the right foot passes the left foot in single support.
- The rhythm and posture of the non-support phase is critical to the outcome of the throw.
- Upper body does not rotate and must remain under control (generally)
- Left arm stays long and wrapped across the throwers midline.
- Shorten levers of the lower body after push off. (keep foot under knee)
- Eyes remain in the direction of the throw (face up!).



2nd SINGLE SUPPORT/TRANSITION

- Right leg remains flexed.
 Allow the ground to come up to the foot.
- At touchdown, the right foot points to 3:00 and the left foot points to 9:00 (traditional)
- Left arm crosses long over the top of the right thigh.
- Thrower must be on balance with the COM over the right foot.
- Thrower is still trying to face up.



2nd Double Support – Power Position

- PP features a narrow base with a left toe – right heel alignment.
- Don't land with straight left leg
- Stay Back!
 - Weight stays back over the right foot.
 - Shot stays behind the right hip.
 - Left arm begins to open/block.
- Aggressively turn the right foot/hip.



2nd Double Support – Delivery Phase

LIFT & CHASE!

- Right shoulder over right foot as long as possible.
- Keep eyes back on shot as long as possible.
- Left elbow goes long and high in the direction of the throw and is then brought into the body to create a stretch through the chest and blocking action of the left side.



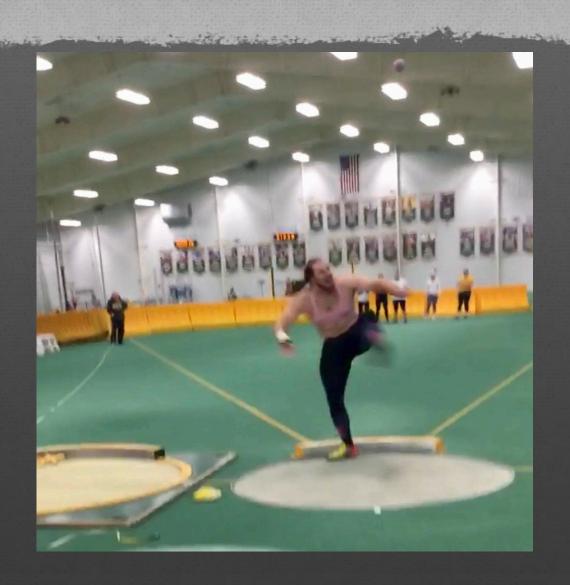
Delivery (cont.)



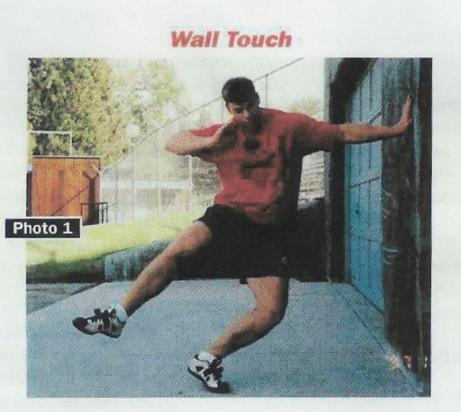
Recovery

- Right side extends as shoulder and arm are held high following release.
 - Rotation continues until athlete lands 90 degrees to direction of throw.
 - Athlete lands on a flat right foot.
- Levers are lengthened for stability.
 - Left leg and arm extend toward 12 o' clock.
- STAY INTO THE SHOT!!!

RECOVERY



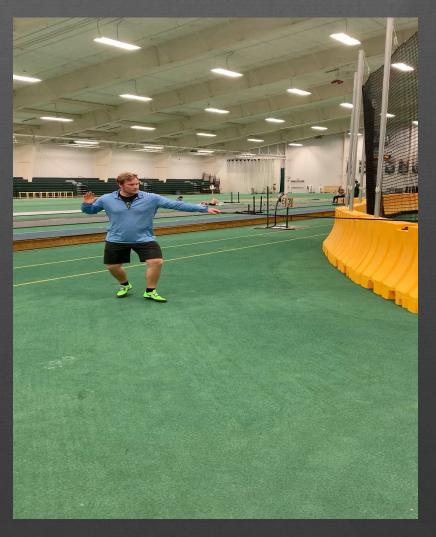
Balance Drills



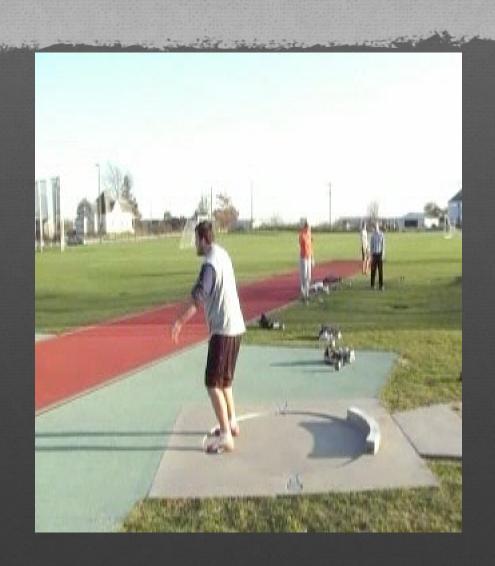


Various Balance Drills





Various Drills



"One of the great mistakes is to judge programs by their intentions rather than their results"

Milton Friedman

- Weekly Training Per Individual Needs
- Throwing 4 x a week (15-25 total various weights)
- Jumping 2 x a week (Progressive through season)
- Sprinting 2 x a week (Progressive through season)
- Lifting 3-4 x a week (volume to intensity through season)

NEBRASKA TRACK AND FIELD

JUSTIN ST CLAIR

University of Nebraska Track and Field jstclair@huskers.com

Instagram / Facebook - cornthrows

PHONE# 402-472-4642

Thank You!! GO BIG RED!