INTRODUCTION

The discus is one of the most challenging movements to master in track and field. The event combines vertical, horizontal, and rotational components with aerodynamic elements. Coupled with proper timing, the event presents a unique challenge that can only be mastered if balance is achieved. The competitive performance of the discus thrower depends on the appropriate combination of:

1. Technique work
2. Improvements in strength
3. Improvements in power
4. Improvements in flexibility

This is accomplished through a training regimen that combines:
- Olympic lifting
- Power lifting
- Bodybuilding
- Running
- Jumping
- Stretching
- Throwing

In working with discus throwers, the coach is presented with the problem of attempting to teach very large people to move with the grace of a ballet dancer and the speed of a sprinter. Herein lies one of the essential keys to successful discus throwing—balance. No matter what technical style is used, balance is paramount. The coach must establish the position of stability and strength for the athlete. But the solution does not rest in copying the technique of a current champion. The technique used by a champion may be the optimum (or, at least, near the optimum) for the person with the same physical attributes as the champion and far removed for a person less endowed or less well trained. The second factor to look at in discus throwing is developing torque. In training discus throwers to develop torque and maintain balance, certain technical problems will develop. If a part of the throw has a problem it may affect the next part of the throw and ultimately the final product. In teaching techniques to beginners, special attention should be paid to the development of the “right reflexes,” as technique can only be mastered if muscle contractions can be coordinated and synchronized to produce maximum total effort relative to discus throwing. It is required that the athlete concentrates on the right movements in the back of the ring in order to master balance and achieve and maintain torque.
Session Overview

- Comparison of technical concepts.
- Commonalities is discus technique.

Discus Technical Analysis

Technical Models
- Wilkins
  - “Linear-rotary style”
  - Wide sweeping right leg produces greater rotary momentum
- Powell
  - “Linear style”
  - Right leg is kept closer to vertical axis for faster rotation and most momentum comes from the “sprint” across the circle

What Is Important?
- Balance.
  - “My only regret is that I didn’t really know what balance was until 1983.” – Wilkins.
- Bad Start = Bad Finish.
- Rhythm.
- Relaxed, easy looking throw.
- Must be able to accelerate into the release.
- Sweeep, dah, dah., Sweeep, right, left
- Reaching an effective power position.
- Discus back, weight on right leg, solid core.
- Proper delivery mechanics.

Big Circles & Little Circles
- Wind up.
- Turn (Big Circle).
- Non-support phase.
- Wheel (Little Circle).
- Delivery (Big & Little Circles).

Wind Up
- Wind up.
- Right foot flat.
- Discus high, big stretch.
- Head and eyes in line with mid point of the body.

Turn - Big Circle
- Turn (Big Circle).
- Weight onto the left leg (70%).
- Left arm long, arm pit over the left knee.
Initiate the turn by turning the left foot.
Left foot, knee, shoulder and arm “on the line.
Right leg is led by the inside of the thigh or instep.

Non-support Phase
- Non-support phase.
- Drive right knee, get off the left leg (knees together).
- Left arm wrapped.
- Keep the discus back.
- Let the make ground contact with the foot.

Wheel - Little Circle
- Wheel (Little Circle).
- Weight on right leg.
- On the ball of the right foot (heel up), keep it turning.
- Left foot down early.
- Keep the left arm wrapped and the discus back.
- Maximum separation between hip and shoulder axis.
- No head movement!

Delivery - Big & Little Circle
- Delivery - Big & Little Circle.
- Head Back!
- Long arm (keep discus away from body).
- Accelerate the right hip (knee in).
- Block (left side) & Chase (right side).

Stand Throw
- Stay back!
- Head back.
- Turning right foot, accelerate the right side.
- Long arm.
- Block and chase.

Discus Teaching Progression

Session Overview
- Grip
- Power Position
- Stand Throw
- Half Turn Throw
- Turning Drills
- Combination & Transition Drills
- Auxiliary Drills
Choose an Appropriate Discus
- A good discus can cost anywhere from $40 to $290.
- The rim weight is the most important factor.
- The higher rim weight discus is for the more advanced thrower.
- The lower rim weight discus is easier to control.

The Grip
- Grip.
- Index finger along the axis of the discus.
- Index and middle finger together or spread apart.
- Joint of the first knuckle on the outside edge of the discus.
- Should be able to hold the discus at your side.

Swinging the Arm with Discus for “Feel”
- Swing discus around to feel forces & necessary control
- Should feel that centrifugal force will keep the discus in the hand (confidence)

Release Drills
- Drop Drill.
- Let the discus fall out of the front of the hand.
- Bowling.
- Vertical tosses.
- Skimming.

Power Position
- Foot placement -Heel to toe relationship, shoulder width apart.
- Solid, upright core.
- Long left side.
- Weight “loaded” on the right side (knee over toes, chin over knee).
- Discus back for a long pull.
- Left arm long and wrapped.

Delivery Mechanics
- Head back.
- Accelerate the right side.
- Block with the left side.
- Transfer energy.
- Prevents fouls.
- Flight.
- Angle of release.
- Plane of the discus.

Stand Throw
- Gentle wind up.
- Stay back!
- Head back.
• Turning right foot, accelerate the right side.
• Long arm.
• Block and chase.

Stand Throw Progression & Drills
• Hip drill
• No Reverse stand throw
• Step out (chase) stand throw
• Stand throw with Reverse
• Throws with cones, bars, balls

Line Drills
• Teaching the Half Turn.
• Turn Drills.
• Modified South African.

Half Turn Drill
• Right foot in the center, left foot in the back (Looks like power position in wrong direction).
• Wind the discus.
• Pivot on the right.
• Step through with the left foot (knees tight) to power position.
• Throw.

Learning To Turn
• Stance – Athletic Position (relaxed).
• Wind up – reach back.
• Load the left.
• Initiate the turn by turning the left foot.
• Lead with the inside of the right thigh.

Turning Drills
• Step around turns (from the middle and in the back).
• 90, 180, 360 degree turns (from the middle and in the back).
• 270 degree turn (Plant the right foot in the middle).
• Line drills (with and without a med ball).
1/4 Turn, 1/2 Turn, Wheel
• The first drill is the 1/4 turn.
• This will put the athlete in a similar they would be in when beginning to sweep the right leg.
• From the 1/4 turn position the 1/2 turn drill is added.
• This will put the athlete in the middle of the ring in position to perform the wheel.
• The final drill is the wheel which will get the athlete into the power position.
• Repeat 1/4, 1/2, wheel until the athlete is comfortable.
The Giant Step, Wheel
- After the athlete has mastered this combination the 1/4 turn and 1/2 turn is replaced by the “giant step.”
- In the giant step the sweeping movement of the start and stops in the middle of the ring.
- This combination is Giant Step, Wheel.

Modified South African Drill
- This drill need not be done in a discus circle.
- The athlete takes an initial stance with the left foot turned perpendicular to the direction of the throw, the right foot is behind the left on line with the throwing direction.
- The discus is swept back behind the athlete, and the weight moves to the right foot.
- The athlete moves his/her weight forward over the left foot as the discus is swung forward and around the right side.
- The athlete drives the right knee into the middle of the circle, performs a jump turn, lands in the middle of the ring and performs a wheel and throw.