

Throwing Development

It is suggested that, before teaching the specifics of Shot, Discus, Hammer and Javelin throws (and, come to think of it, Cricket throwing and Bowling; Handball, Basketball, Baseball, Netball, Volleyball spiking and passing, etc) the athletes are immersed in a range of throwing movement patterns as part of their physical literacy development.

If one knows the destination then it is easier to create the journey as long as this journey is appropriate for the individual concerned. While one outcome might be to see how far a person can throw a given implement the 'how far' element is but a small piece in the jigsaw of throwing actions.

There are a few 'must-do's' when it comes to throwing and although some sports-specific actions and postures might be different there are some movement patterns / actions / postures that appear in most throwing activities. Use these as the focus of the vocabulary you are seeking so you always have a destination in mind.

1. Strong, slow forces work first, fast forces last (check out how the Legs, Trunk and Shoulder all act before the throwing Arm and Hand gets involved)
2. In many cases, there is a transfer of weight from the rear to the front foot.
3. The forces start at contact with the ground and travel through body segments to the final release from the hand.
4. The Hips lead the Trunk leads the Shoulder leads the Arm leads the Hand in the direction of the throw (often creating a 'torque' between Hips and Shoulder).
5. In many cases one side (non-throwing side) is 'braced', braked, or stopped so the throwing side accelerates ahead which creates a stable pillar for the throwing action to work against.
6. Note that these comments are for able-bodied athletes so 'thinking / creative hats' on for the less able athlete.

The aim is to build a wide and deep throwing pattern vocabulary from which the final sports-specific destination can grow. The longer the athlete spends developing a 'general' throwing movement ability the more effective they will be when, later, they are pursuing the specific movement and force patterns of their chosen sport. Stop thinking that a measured throw is the only focus of things – not yet – give them a full education in all related movement patterns that lead to the final competitive throwing choice.

What variables are in your toolbox?

Environment

Rebound off a wall

Throw to partner(s)

Throw for distance

Throw for height

Throw to a target (Watch out! This is a very regressive activity which often sees the throwing action reverting back to a less effective pattern as the accuracy component takes over – use it sparingly)

Body position

From Seated (Feet ahead on floor or Knees bent)

From Kneeling (sitting on Feet)

From Kneeling High (Hips above Knees)

From Split Stance on Knees (L&R)

From Kneeling Split Stance (L&R)

While / after Squatting

While / after Lunging

While / after Jumping

While / after Hopping

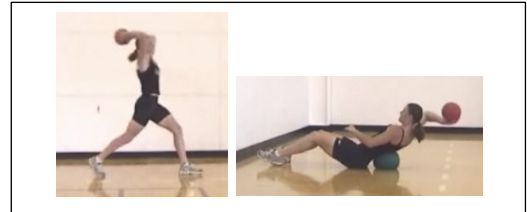
While / after Walking
 While / after Running
 While / after Pivoting
 After catching – Two-Handed and One-Handed from different directions

Action & Direction

Push forwards
 Push upwards
 Rotate and push forwards (L&R)
 Rotate and push sideways (L&R)
 Rotate and sling forwards (L&R)
 Throw forwards from overhead
 Sling forwards
 Sling backwards overhead
 Sling Horizontal (L&R)
 Sling forwards diagonally from low to high (L&R)
 Sling backwards diagonally from low to high



Pushing



Throwing



Slinging

Hands & Feet

Two-Handed – Two Feet
 Two-Handed – One-Foot (L&R)
 One-Handed (L&R) – Two-Feet
 One-Handed (L&R) – One-Foot (L&R)
 Sling with Arms close to the body
 Sling with Arms long

Equipment

Quoits
 Sand-Bags
 Sand-Socks
 Golf balls
 Tennis balls
 Basketballs
 Medicine balls

Short sticks
Longer sticks
Turbo-Javelins
Mini-Javelins
Shot
Discus
Short Hammers
Long Hammers

A simple start might be – *Seated, legs ahead on the floor - in pairs – push pass from Chest – catch & return.* This could evolve to a more complex activity e.g. *Single Foot Hop (L&R) forwards followed by diagonal (Right to Left) backwards overhead sling.*

It is known that 'variability' in training / learning leads to skills being more robust in later settings. By mixing and matching all these variables you have in excess of 60,000 puzzles with which to challenge the learning process.

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