

# So What's Really The Deal?

The Why's and How's Of Multi-  
Directional Speed Training

# Why I am Thankful!

The Opportunities Given To Me and The  
Friendships Gained Through People Like:

Those of the IYCA Family Led by  
Brian Grasso

Plus The Relationships Of So Many Others  
Sitting Here Today!

# Why I DO What I Do?

- I love making an impact on the lives of others and having them impact me.
- I love coaching, teaching, inspiring, and being inspired
- Having parents tell me they were so excited to see their son and daughter physically compare to the others rather than being the unfit, slow, or weak one.
- Creating information that inspires coaches and trainers to become better at their trade- My videos are designed teaching tools to help others understand true Sports Speed.

# My True Love



# Why Understanding Is Important

- If we understand why the body works better in various biomechanical positions we can assess and coach better.
  - Why driving the arms during acceleration is important
  - Why moving the feet into better positions helps acceleration and deceleration
  - Why disassociation of the upper and lower body is important.
  - There are many more “WHY’S”

# Principles: We Will Come Back to These.

## The Things To Hang Your Hat On

- We have to have some truths or principles in which we build our methods from regarding Training:
  1. True Multi-Directional Speed is Subconscious
  2. We must base it off chain reactions or Load to Explode
  3. Have to allow for momentum forces
  4. Must always consider forces of gravity
  5. All movements are multi-planar
  6. Reactions play a major role

# Why We Can Influence Our Speed Techniques Through Proper Warm Up/Mobility

- Things we need:
  - Proper loading of joints: Full range of motion to avoid compensations, and for greater performance.
  - Ability to load then explode (transfer energy): Through muscles but must have proper joint actions.
  - The interaction of the entire kinetic chain to be truly successful.

# Mobility/Flexibility Exercises Focus On Specific Areas Of Concern...

Examples:

- Tall long strides walking backwards focuses on?
- Short knees bent walking backwards focuses on?
- Tall long strides walking backwards with hands high over head focuses on?
- Short knees bent walking backwards with crossover steps focuses on?
  - Group Demo of 1 leg IT Band Stretch.



# Why Understanding The Sport Application Is Important

- Visualize the following sports and athletic positions:
  - Tennis player waiting for a groundstroke
  - Running back running through the line
  - Volleyball player (Libaro) waiting for a serve
  - Wrestler preparing to shoot on a leg
  - Short stop in softball
  - Basketball player driving hard to the hoop
    - *(My DVD's were designed out of the need to understand sports positioning based on principles of movement; Low Box Training for Athletes, Basketball Speed...)*

# You Have To Understand The Functional Application Of Movement

- Should we always be on our heels when squatting? I hope not!
- Should the knees slightly roll in at times? They better!
- Does the back/spine round forward in a functional athletic stance? Sure does! (VB, in-fielder...)

# What's The Symptom and What's The Cause?



# Let's Do A Quick Assessment Of What We Just Saw.

1. We saw knees collapse inward
2. We saw feet/ankles externally rotate, pronate, and evert. Not all bad though.
3. We saw the femur medially and internally rotate.
4. We saw the hips go back and the shoulders come forward. Even from the anterior sagittal view (in front).

# Influence of Shoulders/Upper body



# What Joints Are Over Involved Versus Under Involved



# How To Influence Our Speed Techniques and “Drive” The Body Into Effective Positions

1. We can correct or include loading of key joints in the body for the purpose of:
  - Greater speed. (example; too knee dominant, so involve the hips more)
  - corrective/mobility work. (example; doesn't dorsiflex well, so take the hips out and encourage dorsiflexion)
  - specifically loading one side versus the other. (example; doesn't stabilize the decelerating hip well, so reach across??)

# Example Of Speed Being Supported Or Hindered .

## **Understanding Bilateral Loading versus Unilateral Loading and the Effects on Speed.**

- The importance of using Unilateral Loading on the acceleration patterns when turning and running (Directional Step)
  - The Thorax gets released allowing longer loading through the arms for greater drive.
  - One leg does its job while the other prepares to do its...



# Principles:

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# Principle #1 Subconscious

- If we have to think about it, it is not truly functional multi-directional speed.

Is true Sports Speed Conscious?

Would I be better off to “Drive” Them into the positions or movements I want?

Example; Hip abduction

# Principle #2 Chain Reaction

- True Functional Multi-Directional Speed:
  - Has a loading phase followed by an exploding phase
  - Uses the chain reaction of from many joints and muscles throughout the body
    - Example; Cutting

# Principle #3 Momentum

- True Functional Multi-Directional Speed must allow for the forces driven by momentum.
  - Controlling deceleration has a TON to do with the athletes ability to control momentum.
  - True Sports Speed Technique Training must include the role of momentum.
    - Example; Change of direction/deceleration

# Principle #4 Gravity

- Correct loading of joints in True Functional Multi-Directional Speed is mostly Gravity Driven.
  - Do we really work to bend our knees or work to not OVER bend our knees?
  - Do we really dorsiflex or do we allow dorsiflexion?
    - Example; Running

# Principle #5 Multi-Planar

- Regardless of what the “naked eye” sees  
True Functional Multi-Directional Speed is  
Multi-Planar at each joint.
  - Always consider the prime mover as well as the supportive musculature.
  - Always consider the forces in and around a joint.
    - Example; The Hip

# Principle #6 Reactions

- True Functional Multi-Directional Speed is and the techniques employed are often dictated by the athletes reaction.
  - Repositioning: Hip turn, Plyo step
  - Finding more efficient ways to move the center of mass quickly when **reacting** to a stimuli.
    - Example; Chasing

# The Tip Of The Iceberg

Obviously there are many more principles of Functional Multi-Directional Speed but these 6 will start you thinking.



# Finally! How We Build Our Training

- Principles set our standards for what we as coaches believe to be true about training, in this case, Multi-Directional Speed.
- Tactics or Strategies allows us to know what we will do- what's the plan.
- Methods or Techniques are the actual skills, drills, or exercises we choose.

# **An Opportunity For You To Become The Expert In Your Community!**

- An Investment In Your Knowledge
  - An Investment In Your Future
- But Most Important An Investment In Your Athletes/Clients

**THANK YOU!!!**

**To The IYCA**

And

But More Importantly...

**You!**