Effective Use of Video in the Throwing Events
General Video Usefulness

• Video Across the generations

• Video in the video age
Watching Elite Models

- Commonality Approach
- Video Osmosis?
- Tennis Studies
  (Source: Asad Raza, NY Times)
The “Mirror” Neuron

• Capoeira and Ballet Study-Identify Mirror Neurons

• Same region of brain used whether activity is Performed, Watched, Imagined

• Infant learning
Self Watch vs. Elite

- Effectiveness of each
- In concert with each other
- Utilize same verbiage
Integrating Mirror Neuron Use

• Most effective use/Application
Teaching With Video- Off Field

• Classroom Style
  – Auditory Learner vs. visual learner
  – Group vs. 1 on 1
Off Field Video: Timing of Video

- Timing of video session
  - Time between technical session and video
  - As a precursor to technical session
Off Field Video: Video Checklist

• Video Checklist Defined

• Usage
Teaching With Video- On the Field

• Ipad/tablet coaching

• Video provides instant feedback

• Importance of proper feedback
Specialist Certification: Augmented Feedback (Part 3)

• Providing Feedback
  ○ Frequency
  ○ Feedback Strategies
    ▪ Fading
    ▪ Self-Selected
    ▪ Bandwidth
    ▪ Summary
On Field Video Continued

- Frequency dictated by learning style
- Safety concerns
On Field Video Continued

• Matching feedback with video analysis
General Learning Principles

• Addressing multiple issues
• Motor learning discussion
• Stages of learning
How Do We Learn?

• 3 Major stages motor learning
  – Acquisition
  – Refinement
  – Stabilization or Diversification
Periodization of Video Use

• Periodization
  – Training
  – Cue Systems
  – Corresponding Video Use
Periodization of Video Usage

- Cues used during video review
- Types of feedback accompanying video
- Amount of feedback accompanying video
- Amount of actual video usage
General Preparation Phase

• Limited video usage
  – Introduction to process
  – Little in way of technique
    • Drill sequences
    • Teaching progressions
    • Conditioning (Lifting, Sprint mechanics)

• General Cueing
  – Spatial Cues
  – Posture, rudimentary correctness
  – Introduction to skill acquisition
Specific Preparation Phase

• Video usage prevalent in teaching
  – Skill acquisition bleeds into refinement

• Cues change and become more specific
  – Spatial cues
  – Fragmentive cues (smaller part of big movement)
Precompetitive Phase

• Video used primarily to stabilize technical model with some refinement

• Verbiage is at height of specificity
  – Fragmentive, spatial and temporal cues utilized
Competitive Phase

• Video used primarily as competition review

• Cueing becomes very general
  – Holistic cues
Progression Illustrated

- Gross video usage:

- Accompanying Cue Systems

Simple $\rightarrow$ Complex $\rightarrow$ Simple
Video Angles

- Consistency in angles throughout annual plan
- Consistency to meet situations
- Imagery
  - "your mind doesn’t know that your body isn’t doing it"
Angles Continued

• SP/DT/JT
  – 90 degrees to throw
    • ie Posture, sequential firing, COM undulation, angle of release, etc
  – 180 degrees to throw
    • Shoulder/hip separation, direction of thrower, implement path, etc
Angles Continued

• Hammer/Weight
  – 180 degrees to throw
    • ie Separation, thrower’s direction, correct foot movements, shape of orbit
  – 90 degrees to throw
    • ie posture, steepness of orbit, COM undulation
Questions?

Thank you and Happy Holidays!

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