MULTIPLE SPORTS
COMBINED EVENTS

Colorado Track & Field Coaches Association

January 27-28, 2017
THE ANCIENT PENTATHLON

• Greeks recognize talented athletes that can compete in multiple events.

• 708 BC Lamis wins the first pentathlon at Olympus.

• Events-discus, jump, javelin, run (stade), wrestling

• 3 Divisions-Boys, Youth, Men

• No points awarded, no distances given
MODERN
DECATHLON/HEPTATHLON

• Decathlon Day 1 – 100m, LJ, SP, HJ, 400m
• Day 2 – 110 hh, Discus, PV, Javelin, 1500m
• Heptathlon Day 1 – 100mh, HJ, SP, 200m
• Day 2 – LJ, Javelin, 800m

• Decathlon began in 1911 (two days)
• Heptathlon events began in 1980 (two days)
CHARACTERISTICS OF A CE ATHLETE

• Involvement in multiple sports growing up
• Shows dominance in type II muscle fiber
• Possesses natural speed/power
• Shows balance and coordination
• Has ability to focus and concentrate
• Enjoys new challenges
• Is not injury prone
• Somatotype? Don’t count them out!
YEAR-ROUND TRAINING

• Components
  • 1. The Warm-up
  • 2. The Bio-motor abilities
    • Strength and Power
    • Speed
    • Endurance: Aerobic and Anaerobic
    • Flexibility and Mobility
    • Balance
    • Coordination
    • Relaxation
  • 3. Psycho-sociological factors
  • 4. Technical components
  • 5. Event Strategy
  • 6. Warm-down
  • 7. Restoration and Regeneration
DETERMINE YOUR SYSTEM

- Training Unit – A singular component
- Training Session several sessions
- Microcycle – Could be 7-14 days or variable
- Mesocycle – a set of microcycles, could be 4 weeks
- Phase – a set of mesocycles, Fall, Winter, Spring, Summer
- Macrocycle – An Annual Cycle
- Megacycle – Quadrennium, the Olympic Cycle
7 DAY MICROCYCLE

- Sunday – Active Rest
- Monday – Shot, Specific Strength, Hurdles
- Tuesday – Javelin Tech, Short approach, Extensive Tempo
- Wednesday – Active Rest
- Thursday – LJ Approach, Max Velocity Development
- Friday – Hurdles, Shot, or Jump Run
- Saturday – Technical insufficiencies, Plyos or Jump Training
14 DAY MICROCYCLE

- Sunday – Active Rest
- Monday – Shot/Discus
- Tuesday – 30m flies/LJ
- Wednesday – JT/HJ
- Thursday – 110h/PV
- Friday – Specific Technique
- Saturday – Competition
PHASES

• Rest Period – Off season but active, Time ratio of 1
• High Volume Training, Time ratio of 3
• Early Competitive, Build Up, Time ratio of 2
• Highly Competitive, Optimum performance, Time ratio of 1
5 MONTH BREAKDOWN

- 3 Weeks – low volume/intensity, social psyc
- 5 Weeks – high volume medium intensity, low social psyc
- 2 Weeks – optimum performance, high intensity and social-psyc, low volume
- 5 Weeks – high volume, medium intensity, low social-psyc
- 2 Weeks – optimum performance, high intensity and social-psyc, low volume
PHASE BREAKDOWN

• Include description of where you are in relation to the competition your athlete wants most.
• Identify your intensity and volume according to the phase
• Include these phases in all your mesocycles
• Record and monitor performance and testing and be prepared to change when things go south.
BREAK TRAINING INTO FOURS

• Four years between Olympiads
• Four years of college
• Four years of high school
• Four three-month periods in a year
• Four weeks in a month
• Hopefully four decent days a week to train
• Four events allowed in a high school meet
CHASING THE POINTS

• Many athletes become good at the combined events as a result of training to add points to a high school or collegiate team score.

• In some cases these athletes could be state or national class in one or more events.

• In Colorado the loss of relay meets has taken a toll on discovering CE talent.

• Most HS team coaches have, more often than not, utilized CE training and competing methodology
TIME/INDIVIDUAL

• To optimize performance it is necessary to design training programs that include a periodized plan, event priorities and flexibility.

• The individual must become the most important factor, not the team.

• Training to be a specialist in each event is not feasible. Time and injury will always be limiting factors.
SPECIFICITY OF TRAINING

- Training sessions that are precise and explicit to the action desired.

- Sessions of training that expressly develop the required demands of the event.
COMPATIBILITY

• Units of training that work together in a harmonious manner.
• Units of training that can be mixed without interfering with another unit’s action.
• Units that are working congruent with each other and can be bonded together with greater effect.
  • Speed development runs and exercises with explosive dynamic strength development (short jumps)
  • Speed development runs with movement development, (starts, specific sprint drills)
NON-COMPATIBLE

• Speed development with any type of endurance runs over 800m
• Speed development with strength endurance exercises
• Strength development (maximal) with endurance runs
• Development of coordination with (maximal) strength development exercises
COMPLEMENTARY

• Units of training that can act mutually to make up deficiencies and enhance performance

• Units that can be combined together to create a sequence of action to complete a skill
  • Penultimate, LJ, HJ, 90 degree sole top shin
  • Leaning mechanisms Javelin, HJ
  • Sprint technique drills – 100m, 110h, 100h, 200m
  • Motor acquisition as part of the warm-up
  • Take-off rhythm – LJ, HJ, JT, 110h, 100h, PV
COMMONALITY

• Units of training that share similar biomechanical properties of activity
• Special exercises that simulate actions that can be transferred into technique
• Units of training that have comparatively equal demands on the system
  • Speed endurance - 6 x 100 @ 95-100% with 1 minute rest
TRANSFERENCE

• The body’s ability to accept other training units and use the qualities developed to blend into technique

• Units that convey a property of training from one action to another
  • Sprint drills – 100m, 200m, 400m, hurdles, LJ
  • Power Throws – shot, discus, javelin
  • Dynamic flexibility drills – all events
MULTI-SPORT ATHLETES

• Most combined event athletes also excel in other sports
• Many of these sports have commonalities with the track and field events
• Training units may enhance specific components that will be beneficial during track season
  • Think back to the bio-motor training components of speed, power, endurance etc.
NEW INJURY STUDY U.W.

- Multi-sport athletes = less injury
- NFHS release injury 2 x more likely
- Specialized 60% more injuries
- Soccer highest specialization

- Dr. Timothy McGuine 2015-16
ATHLETES PERSPECTIVE

• Chad Ochocinco “my grandmother made me play every sport available”

• Aaron Rogers “its about the competition, I wanted to be in a premier position having a direct impact on the game” Point guard, pitcher, forward/goalie

• Calais Campbell (Denver South) “I developed my quickness from basketball, leverage and momentum from wrestling, hip thrust and running from track”
OUR CURRENT ATHLETES

• All CE athletes benefit from other sports participation
• Standard sports to skimboard and roller hockey
• Basketball layup and lateral movement
• Conditioning
• Swing the bat
COACHES PERSPECTIVE

- Touch each event 2 x week
- Speed and power in other sports
- Adaptability
- General to specific
- Specialization and collapse
- Career development
- Urban Meyer 42/47 recruits 2016 at least 2 sports
NFL

• 2016 90% of draft picks played multiple sports in high school
  • Track and Field 58.5%
  • Basketball 45.1%
  • Baseball 11.1%
MULTI-SPORTS

• Determine which components are being utilized in the various sports your athletes are participating in and approximate volume and intensity.

• If you are fortunate enough to work with an athlete during another season, don’t duplicate workouts.

• These athletes show up the first day of practice in a semi-trained state.

• Utilize testing to establish baseline component values.
2016 THORPE CUP
• Watch a different sport in which your athlete participates, practice or game, break down the commonalities to track and field.
  • Count the number of jumps performed in basketball/volleyball (plyometrics)
  • What, if any, is their weight room routine?
  • Are there common drills or warm-up techniques?
  • What is the health history of the athlete during other seasons?
CROSS TRAINING

• As mentioned, many components may have been incorporated into training for other sports.
  • Volleyball: speed, agility, coordination, power (plyos), flexibility, quickness, balance, penultimate step
  • Football: strength, power, anaerobic capacity, speed, quickness, coordination, flexibility, balance
  • Basketball: speed, anaerobic capacity, power (plyos), quickness, penultimate step, balance, coordination
  • Cheers/Poms: power (plyos), strength, flexibility, balance, coordination
  • Swimming: power, strength, anaerobic/aerobic capacity, flexibility
INCLUSION THOUGHTS

• Talk with coaches about setting up a comprehensive training program for all out-of-season athletes
• Test the athletes every 2-3 weeks for a variety of components and record. Note improvements and digressions.
• Share the results with coaches and athletes.
• Encourage non-spring athletes to continue training while out for track.
GOAL

• The combined events need to be viewed as one event and not 10 or 7 separate events.

• At the end of the competition it is not the singular event scores but rather the addition of all the points that brings us to our success against the tables.

• Even though competing against individuals is important, chasing the points is the real goal and your position of finish in each event is irrelevant.
MENTAL ASPECTS

• The physical challenge of the combined events is enormous but the mental challenge may be the greater of the two.

• Sports psychology is all about learning to “think right in sport”. Our thoughts and emotions have a direct impact on our performance.

• Each individual must learn how to take control of thoughts and emotions.
• **Emotional Control**: Combined event athletes must practice and develop great skill in maintaining their composure, regardless of the situation or challenge.

• **Attentional Control**: Being able to control the focus of our attention is more commonly known as concentration. Ones ability to concentrate on the skill or strategy for the next successful performance.

• **Arousal Control**: Physical and emotional changes with events. Identify what levels work best for each event and be prepared to go on the roller coaster of ups and downs.
TRANSITIONAL CONTROL

- An application of emotional, attentional, and arousal control.
  - Changing physical, psycho, emotional demands
  - 30 minutes minimum between events
  - Budgeting time, clothing, resting and prep
  - Shifting thoughts to next event
  - Leaving behind celebration of last event
  - Events can’t control transition time, the athlete must control this
  - Think of the transition as an 11th or 8th event and train for it
THE ROUTINE BETWEEN

• Process – leaving behind the past
• Calm – creating a new peace
• Strategy – review the plan
• Psycho-motor – key technical cues, triggers
• Psycho-emotional – “thinking right”
THINKING RIGHT

• Arousal – where should it be?
  • Could change with each event

• Attention – what am I focused on?
  • Listening for cues

• Affirmation – trust yourself!
  • Have been there before

• Activation – DO IT!!
TRANSITION

• Immediate post-event process (5-8 minutes)
  • Process, close last event, cry or celebrate

• Beginning Transition – Calm (5-7 minutes)
  • Quiet time, be free, relax

• Readying for next event – psycho-motor/psycho-emotional (15-20 minutes)
  • Strategic, focus on next event, warm up, build arousal review strategy and cues

• Transition Complete
DAY 1 COMPLETE

• Have a routine in place
  • Warm down
  • Process the day
  • Calm time and relaxation
  • Good sleep
  • Nutrition next morning
  • Begin to refocus
QUALITY CONTROL

• One coach vs several
• Consider the two day experience to be a singular event
• One person must be dedicated to the overall experience
• Input from other coaches can be helpful but also detrimental
• Stick to the plan but plan for deviation
TIME FACTOR

• Determine training emphasis of each event
  • Work on strong events? How strong are they?
  • Work on weak events?
  • Maintain strong events while working on weak ones?
  • Improve all event?
• Average event scores of top 100 decathlons.
  • 100m (915)
  • LJ (970)
  • Shot (815)
  • HJ (860)
  • 400m (900)
  • 110hh (950)
  • Discus (805)
  • PV (900)
  • Javelin (803)
  • 1500m (715)
HEPTATHLON EVENT RANK

• 1 100m hurdles
• 2 high jump
• 3 long jump
• 4 200m
• 5 800m
• 6 shot put
• 7 javelin
### WORLD RANK 2016

#### Decathlon
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<th>Rank</th>
<th>Name</th>
<th>Points</th>
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<tr>
<td>1</td>
<td>Eaton (88)</td>
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<tr>
<td>9</td>
<td>Taiwo (90)</td>
<td>8425</td>
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<tr>
<td>7</td>
<td>Ziemek (93)</td>
<td>8413</td>
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<tr>
<td>17</td>
<td>Scantling (93)</td>
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<tr>
<td>29</td>
<td>D Williams (94)</td>
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#### Heptathlon
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<th>Rank</th>
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<td>Nwaba (89)</td>
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<td>19</td>
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<td>13</td>
<td>K Williams (95)</td>
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<td>24</td>
<td>Day-Monroe (85)</td>
<td>6385</td>
</tr>
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<td>20</td>
<td>McMillan (90)</td>
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WE ATE WELL THE LAST 4 YEARS
TOP TEN WORLD AVERAGE

- **Decathlon**
  - 8537 pts
    - 854 pts average/event
  - 7607 pts 2015 Juniors
    - 761 pts average/event
    - 11.46, 22’2”, 47’8”, 6’5”, 51.19, 15.75, 146’8”, 14’9”, 201’9”, 4:27.58 = 7607

- **Heptathlon**
  - 6563 pts
    - 937 pts average/event
  - 5717 pts 2015 Juniors
    - 817 pts average/event
    - 15.19, 5’6”, 47’, 25.78, 19’4”, 156’8”, 2:20.51 = 5717
## TOP US 2016 JUNIORS

### Decathlon
- Wagner: 7532
- Siporen: 6993
- Friis: 6975
- Agyemang: 6616
- Zandes: 6486
  - Average: 6920 pts, 692 pts/event
  - 2017 World Championship standard: 7090 pts

### Heptathlon
- Fitzgerald: 5451
- Lopes: 5171
- Wigham: 5151
- Lanovas: 5106
- Felix: 5070
  - Average: 5189 pts, 741 pts/event
  - 2017 World Championship standard: 5250
COMPETITIONS

• High School
  • Sam Adams Invite, National Scholastic Pentathlon, Mt. SAC, Great Southwest, National Scholastic, Golden West, Arcadia, USATF CO, Nationals, Juniors, Texas Greatest, Capital Cup (Canada)

• Collegiate
  • Most large relay invites, Indoor Nationals, All Conference Champs, Regionals, Nationals, Pan Am Cup, Thorpe Cup

• Post Collegiate
  • USATF Indoors, most large relay meets, Sam Adams, Mt. SAC, OTC Chula Vista, Texas Greatest, Pan Am Cup, Nationals, Thorpe Cup
FINISHING WHAT YOU START
THANKS TO:

• Dr. Frank Zarnowski “The Pentathlon of the Ancient World”
• Dr. Rick Mcguire and Cliff Rovelto “ Transitional Control in the Combined Events”
• Dr. Lyle Knudson “ Track and Field Training”
• All of the Combined Events Athletes and Their Coaches
CONGRATULATIONS AND CARRY ON
2016 PAN AMERICAN CUP CHAMPIONS