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 evets.
- 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!


USA
2

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 – Quadrenium, 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	Active Rest
• Monday – Shot/Discus	JT/HJ
• Tuesday – 30m flys/LJ	110s/PV
• Wednesday – JT/HJ	Shot/Discus
• Thursday – 110h/PV	100m starts/LJ
• Friday – Specific Technique	Specific Technique
• Saturday – Competition	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

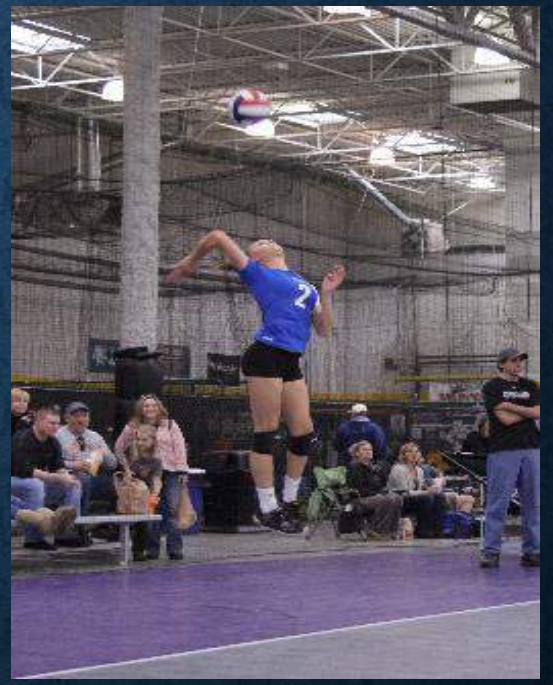
  - Dr. Timothy McGuine 2015-16

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

EVALUATE

- 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.

TAKING CONTROL

- **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 11^{th} or 8^{th} 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?

POINTS

- 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
  - 1 8893 Eaton (88)
  - 9 8425 Taiwo (90)
  - 7 8413 Ziemek (93)
  - 17 8228 Scantling (93)
  - 29 8016 D Williams (94)

- Heptathlon
  - 11 6500 Nwaba (89)
  - 19 6423 Miller-Koch (87)
  - 13 6402 K Williams (95)
  - 24 6385 Day-Monroe (85)
  - 20 6326 McMillan (90)

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

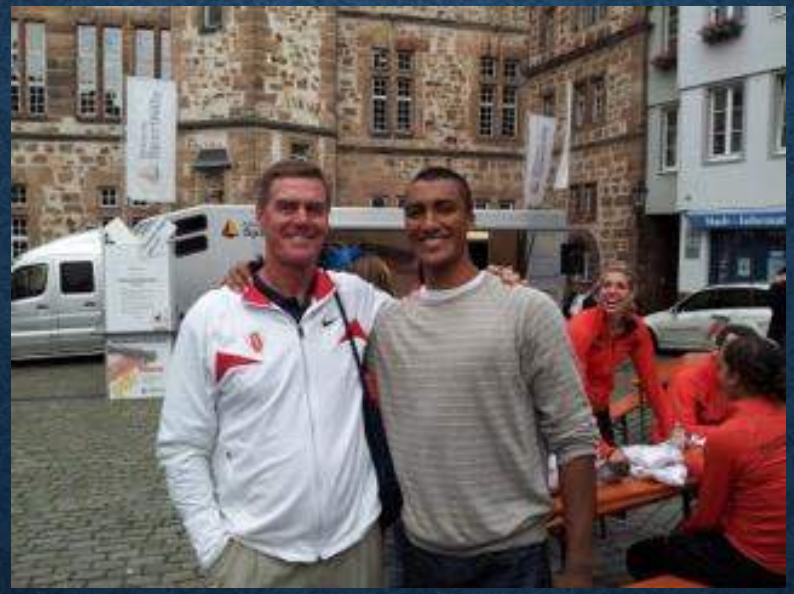
- High School
  - Sam Adams Invite, National Scholastic Pentathlon, Mt. SAC, Great Southwest, National Scholastic, Golden West, Arcadia, USATF CO, Nationals, Juniors, Texas Greatest, Capital Cup (Canada)
- Collegiate
  - Most large relay invites, Indoor Nationals, All Conference Champs, Regionals, Nationals, 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