

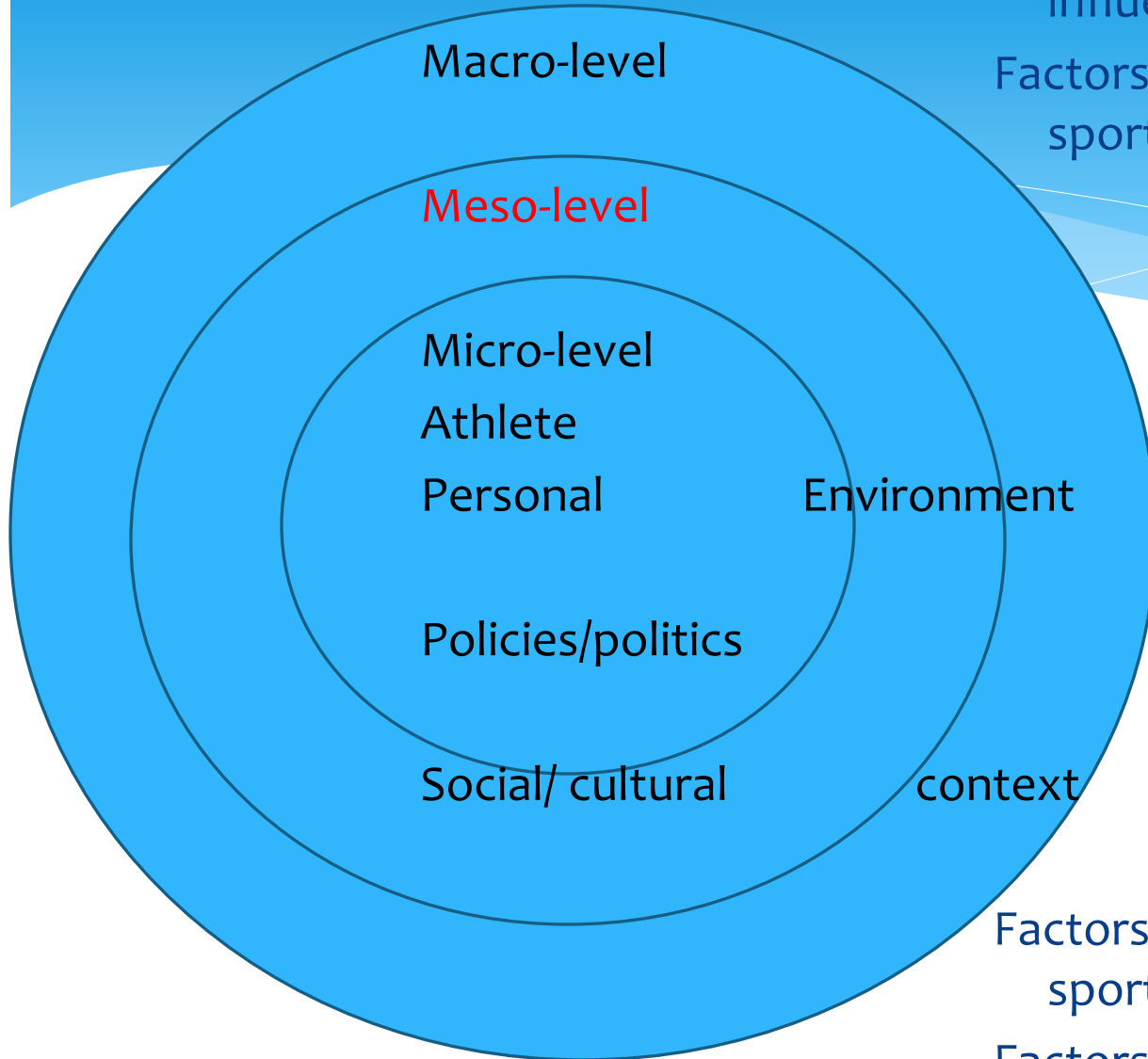
Athlete Development Models: An Essential Variable in Achieving Elite Athlete Success

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Presentation Objectives

- * Define athlete development
- * Assess the weaknesses in existing athlete development platforms.
- * Present the variables that impact elite athlete development.
- * Present existing models for athlete development.
- * Define the focus of the coach in the stages.
- * Discuss theories of free play and deliberate practice in relation to athlete development.
- * Define the role of the coach in each of the stages.
- * Promote the development of master coaches in the different stages of development.

Factors Determining Individual and National Success



Factors that can not be influenced

Factors easily influenced by sport policies

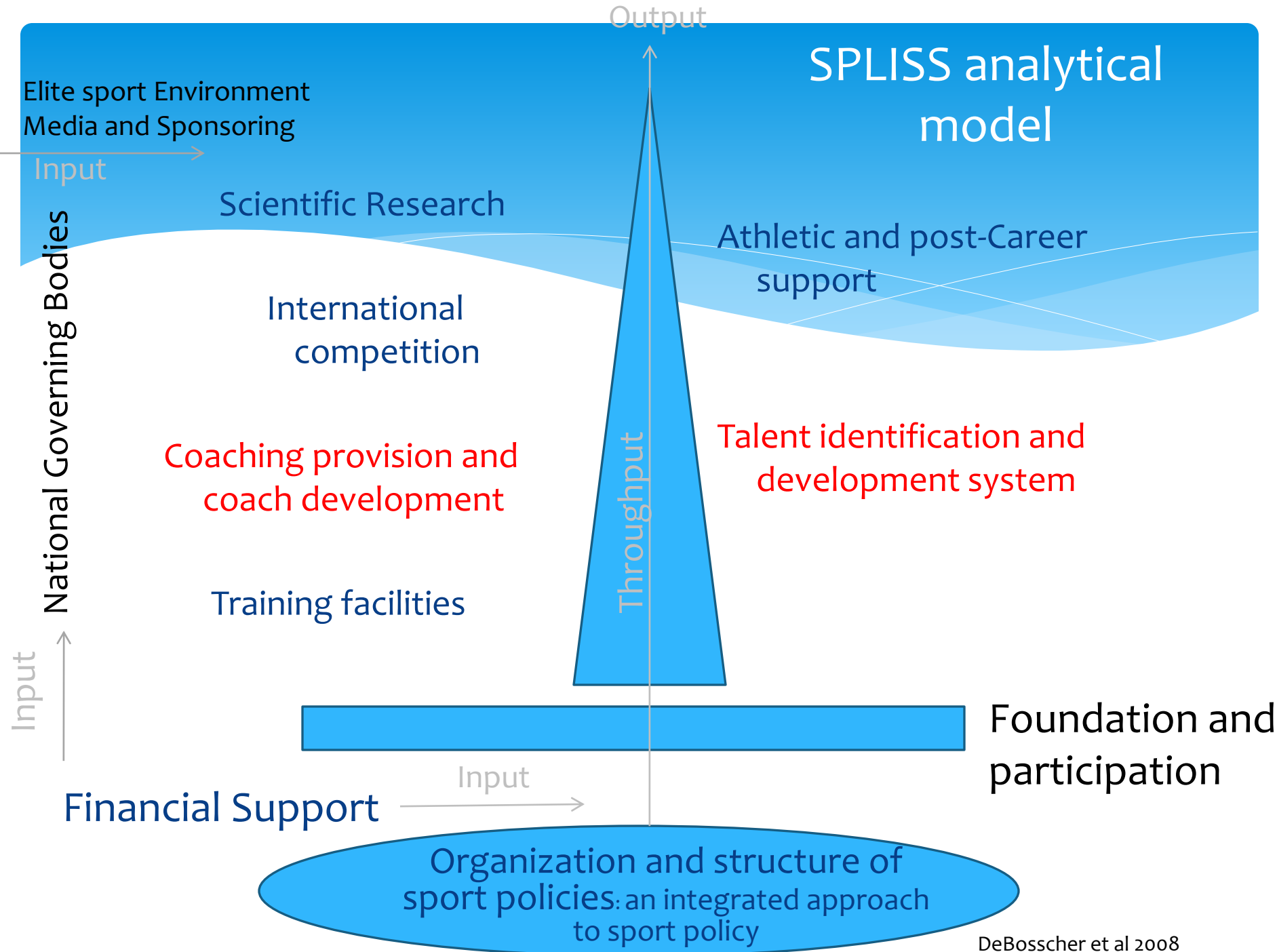
Individual Success

Factors easily influenced by sport policies

Factors that can not be influenced

National Success

National Success



Athlete Development

- * A logical, sequenced pathway
 - * You can't write *War and Peace* without mastering the alphabet, words, sentences, and paragraphs.
 - * A First Grade Teacher does not follow a class to the senior year of high school.
- * It is an expression of a philosophy for an organization.
 - * How do you create an elite player?
- * It is a framework for accountability and aligning training, games and programs.
- * It is a guide for planning of training for all stages of the development of an athlete.

Past and Present Criticisms of Athlete Development Platforms

- * Under-training and over-competing young athletes.
- * Superimposing adult competition schedules on young athletes (the system of competition).
- * Superimposing adult training programmes on young athletes.
- * Superimposing male programmes on females.

Past and Present Criticisms of Athlete Development Platforms

- * Focusing on chronological age versus maturation level and this dominates training and competition designs from ages 11 to 16.
- * Not capitalizing on The “critical” or “sensitive” periods of accelerated adaptation to training.
- * Having the most knowledgeable coaches coaching at elite level, when they should work at the developmental level and volunteer and uneducated coaches coaching at these critical levels.

Past and Present Criticisms of Athlete Development Platforms

- * Specializing athletes early in attempts to retain them and to support business models.
- * Neglecting education of parents and administrators with regards to long-term athlete development (nutrition, regeneration, maturation and psycho-social development, etc...).
- * Lack of the integration of sport science, sport medicine and sport-specific technical-tactical activities.
 - * US Strategy based. (Bayli and Way 2008)

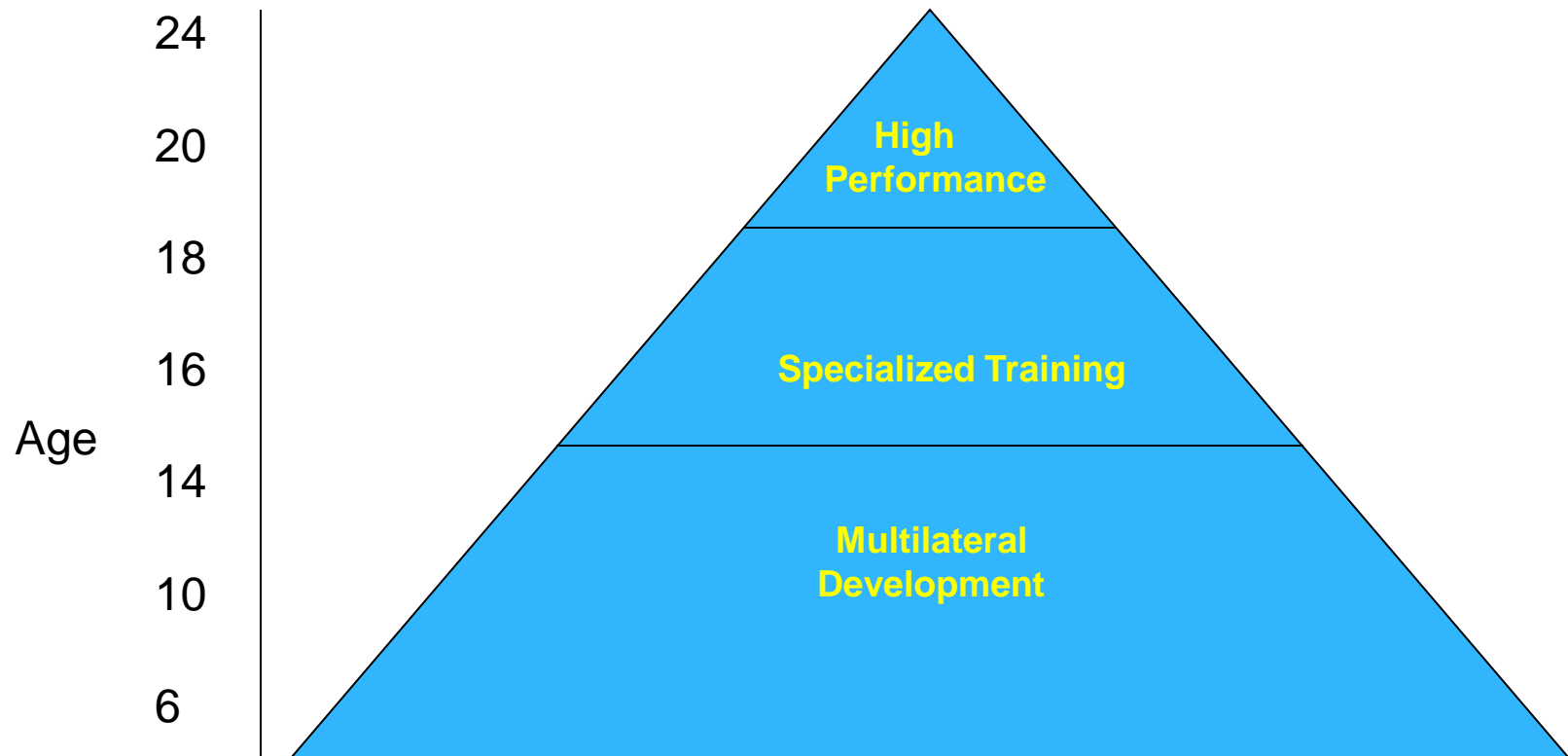
Consequences

- * Damage done between age 6-10 and 10-16 cannot be fully corrected.
 - * Players / athletes will never reach genetic potential
 - * Player development left to chance
- * Developing mediocre players from the "damages" of earlier training.
 - * (Balyi and Way 2008)

Consistent Themes in Athlete Development Models

- * Developmental Stages Defined
 - * Number and Classifications differ
- * At Younger Ages Decentralized
 - * Autonomy of the Club
- * Developmental Years More Centralized
 - * More support and guidance from sport organization
 - * Focus on
 - * Best Players with Best Players
 - * Best Players with Best Coaches
 - * Best Players with Best Facilities

Classic Structure for Athlete Development

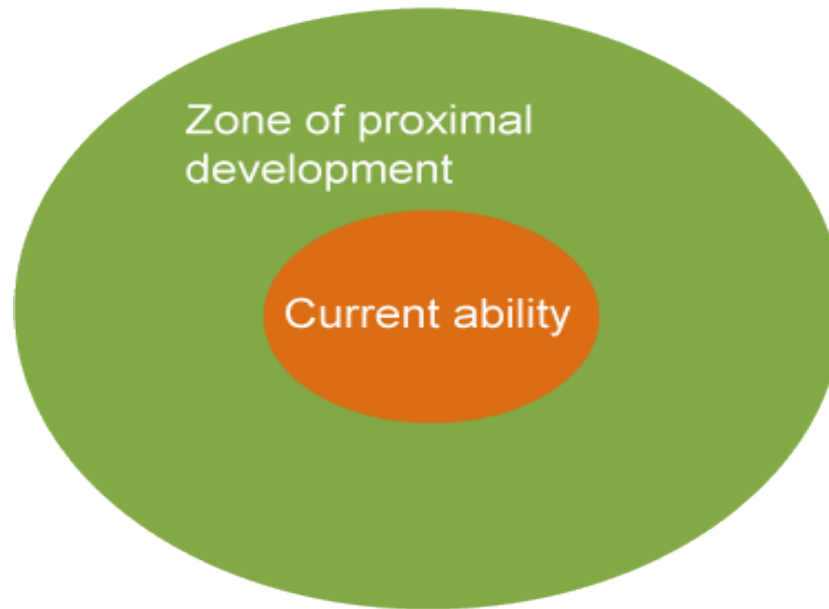


Existing Flawed Structure for Athlete Development



Zone of Proximal Development

- * Zone of Proximal Development (Vygotsky)
 - * The difference between what a learner can do without help and what he or she can do with help.



Important Facts

- * The best age for acquiring sports skill is considered to be 8-12 for girls and 8-13 for boys (Adams, 1981; Nadori, 1985, Singer, 1970)
- * However, until the age of 10 the acquired skills are rather unstable and children are less able to use the acquired elements of motor coordination for formation of a new skill (Farfel, 1959)
- * High possibilities for acquiring various motor skills are revealed at the ages of 10 to 12 (Korobkov et al., 1962)
- * After the onset of PHV acquiring of motor skills is complicated by disorders in motor coordination (during Peak Height Velocity), and later by the formation of individual forms of motor coordination after puberty (Viru, 1995)

LTAD Seven Stages

- * Active Start
- * **FUNdamental**
 - * **Chronological Age/Development Age**
Males: 5-9- Females: 5-8
- * **Learning to Train**
 - * **Chronological/ Development Age**
Males: 9-12 Females: 8-11
- * **Training to Train**
 - * **Developmental Age – onset of PHV**
Males: 12-16 Females: 11-15
- * **Training to Compete**
 - * **Chronological Males: 16-23 +/- Females: 15-21 +/-**
- * **Training to Win**
 - * **Chronological Age Males: 19 +/- Females: 18 +/-**
- * Active for Life

US Soccer Player Development Model

- * Three areas/zones of development and the dynamics that are at play in each age grouping
 - * – Zone 1 – Base Level
 - * Ages 6-12
 - * – Zone 2 – Growth Level
 - * Ages 13-18
 - * – Zone 3 – Elite Level
 - * Above the age of 18

US Compared to Canadian Model

- * Zone 1: Basic USA Model
 - * **FUNdamental**
 - * **Chronological Age/Development Age**
Males: 5-9- Females: 5-8
 - * **Learning to Train**
 - * **Chronological/ Development Age**
Males: 9-12 Females: 8-11
- * Zone 2: USA Model
 - * **Learning to Train**
 - * **Chronological/ Development Age**
Males: 9-12 Females: 8-11
 - * **Training to Train**
 - * **Developmental Age – onset of PHV**
Males: 12-16 Females: 11-15
- * Zone 3: Elite USA Model
 - * **Training to Compete**
 - * **Chronological Males: 16-23 +/- Females: 15-21 +/-**
 - * **Training to Win**
 - * **Chronological Age Males: 19 +/- Females: 18 +/-**

German Player Development Model

* D-Juniors (12-13 years): Objectives for Player Development

- * Training basic technique
- * Training individual tactical routines
- * Learning the basics of group tactical behavior- open play
- * Physical conditioning (by fun, enjoyable exercises)
- * Encouraging other sports boosting football performance
- * Seriousness, own initiative, proactiveness

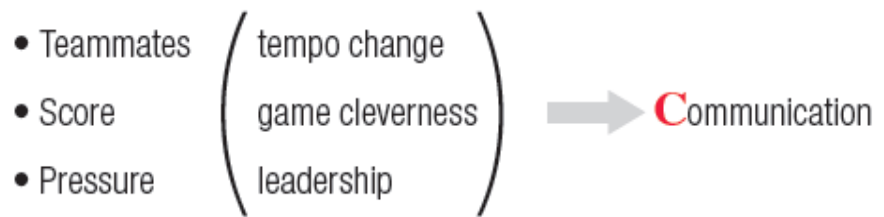
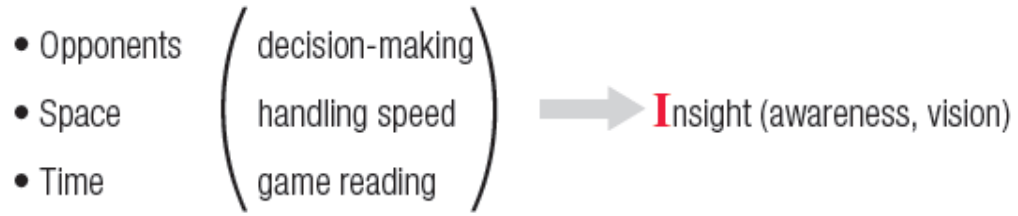
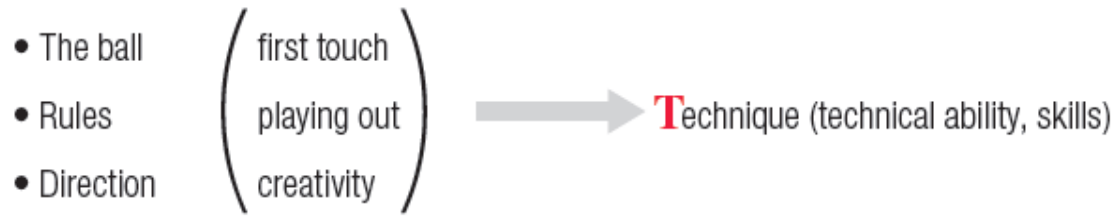
C-Juniors (14-15) Objectives for Player Development

- * Training, dynamic“ techniques
- * Group tactical routines Attacking & Defending
- * Individual skills - strengths, weaknesses, both feet
- * Challenge motor skills (coordination, strength, pace)
- * Offer other sports boosting football performance
- * Promote personal sense of responsibility

B- Juniors (16-17)

- * Training techniques at speed, under time/opponent pressure
- * Individual preparation for requirements in different positions (technique training)
- * Training tactical details (within group and with full team)
- * Systematic, specific conditioning
- * Offer other sports boosting football performance
- * Demand daily commitment in sports and at school

At the individual player level the team tasks lead to individual skills and competencies that are position specific and partly depend on the style of play / formation. These are always defined by *Technique, Insight and Communication*.



related to the mental and physical development phases.

Learning to master the ball	U/6-U/7 4 x 4	No formation / tactics consist of only very general instructions	Getting a 'TIC' for football
Learning to act with the ball purposefully	U/8-U/9 7 x 7	1-3-3 formation / basic tactical instructions / everyone plays <i>all</i> positions	TIC
Learning to play together purposefully	U/10-U/11 9 x 9	1-3-2-3 formation / limited tactical instructions / talent for specific positions more clear (but still flexible)	TIC
Learning the positions and basic tasks in 11 v 11	U/12-U/13 11 x 11	1-4-3-3 formation: Extending tactical instruction explaining the positions and basic tasks	TIC
Learning how the basic tasks link together	U/14-U/15 11 x 11	1-4-3-3 formation: Choice / specialising for a position + corresponding tactical instruction	TIC
Learning how to play as a team	U/16-U/17 11 x 11	1-4-3-3 formation: Extending development on one position related to the team's output	TIC Football Conditioning
Performing / winning as a team	U/18-U/19 11 x 11	1-4-3-3 formation: Perfection per position and as a team: result-oriented team-work	TIC Football Conditioning

Zone 1: Fundamentals

- * ABC
 - * Agility, Balance, Coordination, Speed
 - * Introduce the Ball
 - * Multiple sports & Activities
 - * Eye hand or eye foot coordination
 - * Relays and Games
 - * Free Play, Guided Play and Pretend Play

Zone of Proximal Development: Free and Guided Play

- * Children are capable of a range of achievement during each stage of their lives by being in the right environment, with right guidance.
- * Free and guided play led to self control, cognitive flexibility and working memory.
 - * Executive Functions
- * Three models
 - Structure practice set up and run by coach
 - Coach provides Ball and space and guides them **
 - Roll out the ball

Zone 1 & 2: Learning to Train

Chronological/ Development Age

Males: 9-12 Females: 8-11

- * Structure competition to address differences in training age and abilities.
- * Multisport (3 sports optimal)
- * Apply a ratio of 70 per cent training to 30 per cent competition.
- * The 30 per cent ratio includes competition and competition-specific training. Athletes undertaking this type of preparation are better prepared for competition in both the short- and long-term than those who focus solely on winning.
- * Encourage unstructured play.

Zone of Proximal Development: Introduction of Deliberate Practice

* Talent Code (Coyle)

- * When we train the right way our myelin responds by wrapping layers of insulation around that circuit adding skill and speed.
- * We get there by operating at the edge of our ability not by training harder but by training deeper, on the edge of failure as often and long as possible.
- * Not a comfortable state, here is where the master coach can recognize it and take you there.
- * Specific Goals, Immediate Feedback, Focus on technique and not outcome.

Zone 2: Training to Train

Developmental Age – onset of PHV

Males: 12-16 Females: 11-15

Zone of Proximal Development

- * Deliberate Practice
- * Introduction of Competition
- * Physically Demanding
- * Mentally Demanding
- * Decision Making
- * Finding Self
- * Recognize Physiological Changes in the athlete
 - * Stretching/Flexibility

Training to Train

- * Learn to cope with the physical and mental challenges of competition in training and games.
- * Optimize training and competition ratios and follow a **60:40 per cent training to competition ratio**.
 - * Too much competition wastes valuable training time and conversely, not enough inhibits the practice of technical/tactical and decision-making skills.
- * Train athletes in daily competitive situations in the form of **practice matches or competitive games and drills**.

Training to Compete

Chronological Males: 16-23 +/- Females: 15-21 +/-

- * Specialization
- * Position Specific
- * Individual Training
- * Tactical Decisions
- * Psychological

Zone 3: Training to Win

Chronological Age Males: 19 +/- Females: 18 +/-

- * Train athletes to peak for major competitions.
 - * Periodization
- * Ensure that training is characterized by high intensity and relatively high volume.
- * Allow frequent preventative breaks to prevent physical and mental burnouts.
- * Change the training to competition ration 25:75, with the competition percentage including competition-specific training activities.

Zone of Proximate Development

- * Physiological
- * Nutritional
- * Psychological
- * Tactical
- * Technical

The Five by Five Coaching Model: LTAD

Master Coach	Master Coach	Master Coach	Master Coach	Master Coach
Head Coach	Head Coach	Head Coach	Head Coach	Head Coach
Assistant Coach	Assistant Coach	Assistant Coach	Assistant Coach	Assistant Coach
Apprentice Coach	Apprentice Coach	Apprentice Coach	Apprentice Coach	Apprentice Coach

Fundamental

**Learn to
Train**

**Train to
Train**

**Train to
Compete**

Train to Win



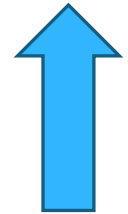
The US Modified Three-By-Three Coaching Model

Master Coach	Master Coach	Master Coach
Head Coach	Head Coach	Head Coach
Assistant Coach	Assistant Coach	Assistant Coach
Apprentice Coach	Apprentice Coach	Apprentice Coach

Basic

Growth

Professional/Elite



Summary

- * Athlete Development is philosophy to be successful it has to reach all involved in the different stages of player development.
- * Can be accomplished through coaching and administrator as well as parent education.
- * Needs to be an appreciation for the importance of the fundamental levels and what coaches are doing at those levels.
- * If coaches in each of the stages does not fulfill their function, the plan fails.
- * Equal Encouragement and recognition of the coaches at all levels.

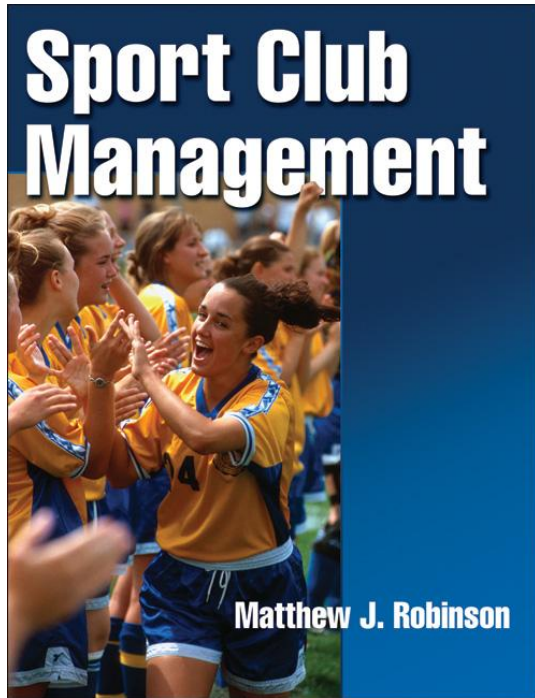
Recognition and Thanks

- * USOC
- * IOC and Olympic Solidarity
- * US Soccer
- * University of Delaware
- * Richard Way

Questions?



Thank you for attending!



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