You’ve got me, now keep me!

A Introduction to the Principles and Practice of Long Term Athlete Development

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What do you **REALLY** need to know about LTAD?
Are we winning medals?

The British Talent Development Ladder

PLAYGROUND

PODIUM

Australia

France

Soviet Union

East Germany


It is a talent development model.

The initial stage of the LTAD model, if successfully applied, does have benefits wider than talent development.
• Long-term athlete development is not an elitist model!

• LTAD (or LTPD!) provides the base for participating in lifelong physical activity as well as to train and compete in performance sports.
It is being used by many NGBs to re-model their own talent development pathways
Final Drafts
It requires a “staged” approach

- Stage 1: FUNdamentals
- Stage 2: Learning to train
- Stage 3: Training to Train
- Stage 4: Training to Compete
- Stage 5: Training to Win
- Stage 6: Retirement/redeployment
Successful passage through the FUNdamental stage of LTAD is vital

Do our coaches, teachers and parents work together to produce “physically literate” youngsters?
Long Term Athlete Development

What are our main concerns about sport and physical activity?

1. Not achieving mass participation

2. Perceived/actual lack of success in international competition
Are we achieving “MASS PARTICIPATION”? 

Participation level

PLAYGROUND

Age

12

18
CAN’T CATCH?
Can’t Catch? – Won’t play!

Adapted From Mike Jess, University of Edinburgh
Long Term Athlete Development
Fundamentals stage
What is important?

• smiles, fun and laughter
• involve Mum and Dad (particularly Mum!)
• play lots of different sports
• develop “physical literacy”
This is not a “high performance” model but rather an athlete retention model. By increasing each young person’s success rate, by keeping more young people playing sport longer, there will be a larger pool of potential talent to fish in.
Lifelong Physical Activity

Interested
Motivated
Regular
Participant

Unlocking Potential Talent

Talented
Motivated
Committed
Athlete

FUNdamentals

Loughborough Sport
developing people, developing sport
FUNdamentals Phase

Chronological Age: Male  6-9 years & Females: 6-8 years

- FUN, participation and child centred “playful environment”
- Focus on general overall movement skills development
- ABCs of Athleticism – Agility, Balance, Co-ordination & Speed
- Medicine ball, Swiss ball, own body strength games/exercises
- No periodisation but semi-structured programme
- Physical activity 5-6 times per week (note: definitions!)
- Simple rules and ethics of sport
It requires a **long-term** approach

It takes 10 years to excel in any area. Do our coaches, teachers and parents take decisions that benefit long-term development of athletes?
Long Term Approach

“It takes 10 years of extensive training to excel in anything”

Herbert Simon, Laureate

10 YEAR RULE!

“Scientific research has concluded that it takes eight to twelve years of training for a talented athlete to reach elite levels”

Bloom, 1985; Ericsson et al., 1993
Biological not chronological approach that is athlete-centred

Can our coaches and teachers deal with individuals within groups?
Critical or Sensitive Periods of Trainability - Females
(Balyi and Hamilton, 1999)

- Critical or Sensitive Periods of Trainability
- Aerobic Window
- Strength Window
- PWV
- Menarche
- Speed Window 1
- Speed Window 2
- Motor Co-ordination Window
- ABC's+ABC's+KGB's

Critical or Sensitive Periods of Trainability

Menarche

PWV

Strength Window

Speed Window 2

Motor Co-ordination Window

Speed Window 1

ABC's+ABC's+KGB's

Aerobic Window

Age

cm/year
• Peak Height Velocity

• Adolescent growth spurt*

Peak height velocity in girls occurs about twelve years of age. Usually the first physical sign of adolescence is noted in breast budding which occurs slightly after the onset of the growth spurt. Shortly thereafter, pubic hair begins to grow. Menarche or the onset of menstruation comes rather late in the growth spurt, occurring after peak height velocity is achieved. The whole sequence of events, however, may normally occur two or even more years earlier or later than average. Ross et al. (1977)
How old is a 14 year old?
Figure 29: Radiographs of two boys both aged 140 years: (left) bone age 120 ‘years’; (right) bone age 160 ‘years’
Individual athletes require individualised training and competition programmes

Can our coaches, teachers and parents plan and work towards individual training and competition schedules?
“Windows of Trainability”

There are set periods during the biological development of young athletes that allow particular facets (e.g. strength, speed, etc) to be maximised through training.
MATURITY EVENTS IN GIRLS

Peak height velocity in girls occurs about twelve years of age. Usually the first physical sign of adolescence is noted in breast budding which occurs slightly after the onset of the growth spurt. Shortly thereafter, pubic hair begins to grow. Menarche or the onset of menstruation comes rather late in the growth spurt, occurring after peak height velocity is achieved. The whole sequence of events, however, may normally occur two or even more years earlier or later than average. Ross et al. (1977)
It is vital that coaches are aware of the so-called critical periods "accelerated adaptation" so that these windows of opportunity are exploited to their full potential.
Training and competition programmes are periodised.

Do our coaches, teachers and parents know what this means?
There are early and late specialisation sports

For late specialisation sports, specialisation before age 10 is not recommended since it contributes to early burnout, dropout and retirement from training and competition.
Coach Education is at the core of LTAD

Without knowledge, skills and understanding LTAD is a “non-starter”
A final thought…

A bird in the hand…