

## Model for Long Term Athlete Development

Sports can be classified as early specialization (e.g. gymnastics) or late specialization (e.g. Track and Field, Team sports). Early specialization sports require a four phase model while a late specialization model requires six phases.

### Early Specialization Model

1. Training to train
2. Training to compete
3. Training to win
4. Retirement & retainment

### Late Specialization Model

1. FUNdamental
2. Learning to train
3. Training to train
4. Training to compete
5. Training to win
6. Retirement & retainment

## Late Specialization Model

### Phase 1 - FUNdamentals

This phase is appropriate for boys aged 6 to 9 and girls aged 5 to 8. The main objective should be the overall development of the athlete's physical capacities and fundamental movement skills. The key points of this phase are:

- Participation in as many sports as possible
- Speed, power and endurance are developed using FUN games
- Appropriate and correct running, jumping and throwing techniques are taught using the ABC's of athletics
- Introduction to the simple rules and ethics of sports
- Strength training with exercises which use the child's own body weight; medicine ball and Swiss ball exercises
- Training programs, based on the school year, are structured and monitored but not periodised
- Develop the athlete's:
  - ABC's (Agility, Balance, Coordination and Speed)
  - RJT (Running, Jumping, Throwing)
  - KGBs (Kinesthetics, Gliding, Buoyancy, Striking with a body part)
  - CKs (Catching, Kicking, Striking with an implement)

The first 'critical period of speed development' will occur during this phase, age 6-8 for girls and 7-9 for boys respectively. Linear, lateral and multi-directional speed should be developed and the duration of the repetitions should be less than 5 seconds. Fun and games should be used for speed training and the volume of training should be lower.

## **Phase 2 - Learning to train**

This phase is appropriate for boys aged 9 to 12 and girls aged 8 to 11. The main objective should be to learn all fundamental sports skills. The key points of this phase are:

- Further develop fundamental movement skills
- Learn general overall sports skills
- Continue to develop strength with medicine ball, Swiss ball and own body-weight exercises as well as hopping-bounding exercises
- Continue to develop endurance with games and relays
- Introduce basic flexibility exercises
- Continue to develop speed with specific activities during the warm-up, such as agility, quickness and change of direction
- Develop knowledge of warm up, cool down, stretching, hydration, nutrition, recovery, relaxation and focusing
- Training programs are structured and based on a single periodisation
- Competition is structured and a 70:30 training/practice to competition-ratio is recommended

## **Phase 3 - Training to train**

This phase is appropriate for boys aged 12 to 16 and girls aged 11 to 15. The main objective should be the overall development of the athlete's physical capacities (focus on aerobic conditioning) and fundamental movement skills. The key points of this phase are:

- Further develop speed and sport-specific skills
- Develop the aerobic base - after the onset of PHV
- Learn correct weight lifting techniques
- Develop knowledge of how and when to stretch, how to optimise nutrition and hydration, mental preparation, how and when to taper and peak
- Establish pre-competition, competition and post competition routines
- The strength training window for boys begins 12 to 18 months after PHV
- There are two windows of opportunity to strength training for girls
  - Window one is immediately after PHV
  - Window two begins with the onset of menarche (the first [menstrual period](#))
- Special emphasis is also required for flexibility training due to the sudden growth of bones, tendons, ligaments and muscles
- A 60% training to 40% competition ratio (includes competition and competition-specific training) is recommended

## **Phase 4 - Training to compete**

This phase is appropriate for boys aged 16 to 18 and girls aged 15 to 17. The main objective should be to optimise fitness preparation, sport/event specific skills and performance. The key points of this phase are:

- 50% of available time is devoted to the development of technical and tactical skills and fitness improvements
- 50% of available time is devoted to competition and competition-specific training
- Learn to perform these sport specific skills under a variety of competitive conditions during training
- Special emphasis is placed on optimum preparation by modeling training and competition
- Fitness programs, recovery programs, psychological preparation and technical development are now individually tailored to the athlete's needs
- Double and multiple periodisation is the optimal framework of preparation

## **Phase 5 - Training to win**

This phase is appropriate for boys aged 18+ and girls aged 17+. The main objective should be to maximize fitness preparation and sport/event specific skills as well as performance. The key points of this phase are:

- All of the athlete's physical, technical, tactical, mental, personal and lifestyle capacities are now fully established and the focus of training has shifted to the maximization of performance
- Athletes train to peak for major competitions
- Training is characterized by high intensity and relatively high volume with appropriate breaks to prevent over training
- Training to competition ratio in this phase is 25:75, with the competition percentage including competition-specific training activities

## **Phase 6 - Retirement & retainment**

The main objective should be to retain athletes for coaching, officiating, sport administration etc.