

Athlete Development Support Pathway

Based on Long Term Athlete Development

1. Active Start – for boys and girls aged 0-6 years

In this stage children learn through free play and develop Fundamental Movement skills based upon:

- Skills Self – Discovery
- Motor/Locomotor Skills
- Balancing and Coordination Skills
- Specific Control Skills

This helps them to see physical activity as fun and exciting part of everyday life.

Active Start stage – through daily physical activity – enhances brain development, physical coordination, motor skills, neuromuscular coordination, brain to muscle development, activity through kinaesthetic learning, balancing problem solving and mimicking others, will also enhance bone development through multi-joint body activities.

Helps children to build confidence and social skills, use the imagination, control emotions.

The key purpose of this stage is to provide opportunities for children to try as many new skills as possible in a safe and stimulating environment to help them develop skills needed to progress through the later stages of their athletic development – in a competitive or non-competitive environment.

During this stage of development there are generally no differences between boys and girls but it's important to remember that the larger muscles are more developed than the small ones, energy levels are high but deplete quickly, hand-eye coordination is at the very early stages of development and concentration span is low; therefore all activities should be vigorous and performed often for short periods of time rather than at low intensity and long duration.

Children in this stage should be active to some point of every waking hour; they should be allowed to discover their limits and to take small but fun risks in safe supervised settings with daily physical activities emphasising free unstructured game play and focus on fun.

The National Curriculum activity should be focusing on promoting the effective teaching of swimming, musical movements and gymnastics.

2. FUNdamentals – for males 6-9 years, females 6-8 years

In this stage children continue to develop their fundamental movement skills including the ABCs of Agility, Balance, Coordination and Speed through fun, structured play, deliberate practice in multi-sport environment both on land and water rather than a training regime in a single sport.

Focus remains on structured play developing Fundamental Movement Skills learning whilst introducing some very basic self-directed sport skills.

The key future goal is to meet the ABCs of athleticism:

- Agility, Balance, Coordination, Speed
- Running, Jumping and Throwing
- Catching, Passing, Kicking, Striking objects and targets with an implement
- Kinaesthetics, Gliding, Buoyancy, Striking with parts of the body
- Skills learning through fun and games on daily basis
- Unstructured and structured play activities
- Need for frequent rest periods
- Fine motor skills not fully developed
- Eye focus not fully developed as an eye-hand coordination
- Sport specific movement skills being introduced

The physical development between boys and girls still remains pretty much at the same level but girls may develop coordination skills faster than the boys; basic motor patterns become more refined and the balance mechanism is gradually maturing hence great improvement in speed, agility, balance, coordination and flexibility.

Their attention spans are brief, their energy levels are high and their control over their bodies is still low; memory is developing in a progressive way with the imagination blossoming, so coaches must use short, clear and simple instructions, be able to provide a correct demonstration and encourage experimentation and creativity.

Participating should be made exciting, competitive results seen as fun, win or lose, being with friends and developing strong self-esteem being an overall goal.

3. Learning to train – for males 9-12 years, females 8-11 years

In this stage called by some experts of children development “The Golden Age of Learning”- children start to convert their fundamental movement skills into fundamental sports skills.

Towards the end of this phase (normally when an athlete starts secondary school education) an athlete should pick the sport they want to specialise in and start focusing on specific training required to succeed.

During the stage though they should engage in range of activities, playing 2-3 different sports per year while their bodies adapt to skills training and improved motor control.

The key during this stage is to be exposed to a gradually developed range of fundamental sport skills – as many as possible should be attained prior the pubertal growth spurt and Training to Train phase of development;

Fundamental Movement Skill development should continue but more focus is now placed on the primary aspects of Sport Specific skills learning including focus on the fun and games-based approach.

The physical development of the participants will be as follows:

- Large muscles control still better than fine motor control
- Far sighted often due to shallow shape of the eye
- No fear and low skill level often lead to accidents
- Bone/ligament growth not yet complete, therefore cannot withstand too much stress
- Introduction to ancillary capacities such as
 - how to perform correct warmups and swim downs, simple stretching exercises, basic nutrition and hydration strategies, introduction to mental imagery, simple competition preparation routines, recovery and regeneration practices
- body weight strength development including simple stretch cord, medicine ball and swiss ball exercises
- introduction to rules, codes, ethics and fair play

Talent Nature begins in this stage leading to identification, development and specific environment to meet participant needs with focus on specialising in one sport and introduction to periodization.

Chosen sport specific training increase to four times per week with participation in other sports limited to two - three times per week.

Emphasis should be on skills development as the primary focus of training with aerobic development as the secondary with training taking priority over competition.

The key to maximising and sustaining talent over the long runs is to plan the correct mix of training loads prior to physical maturity and to plan for continued improvement after physical maturation through technique development and proper aerobic training.

It is important that support and adequate training programme are in place to ensure all athletes are given opportunity to develop.

Children in this stage enjoy practising skills and seeing their own improvement so correction, encouragement and praise are vital, continued skill development through play and self-discovery activities that stimulate positive emotional experiences.

They are eager to learn but attention span may still be short with limited reasoning ability and blossoming imagination.

Participants are very often sensitive to criticism and ridicule from peers and may have potential problems dealing with failure.

4. Training to train – for males 12-16, females 11-15

This stage is considered to be the most important stage of athlete development.

Young athletes need to build strong aerobic base, consolidate their sport-specific skills, increased training frequency and duration are essential to develop and fulfil long-term potential.

Athletes must be constantly monitored to ensure that training and competition programme is supporting athlete's physical growth and emotional maturation.

During this stage athletes will enter their growth spurt and experience rapid increase of physical abilities.

Girls tend to mature earlier than the boys so at the beginning of the stage there can be as much as +/- 2 years difference between the genders with more encouragement needed for the girls to focus on their sport (swimming) if they have aspirations of high performance, however when athletes reach their Peak Height Velocity (PHV) boys become stronger as they lose fat, gain muscle and have more endurance.

At the same time, girls gain height and strength but not to the same extent as the boys.

During the growth spurt, especially if it happens fast, coordination can become unbalanced and movements seriously compromised – skills may fall apart or become inconsistent as limbs and torso don't have the same proportions in strength and length week by week.

In training emphasis should be on aerobic development and continuing developing and perfecting technical skills, gradually introducing strength and speed to accommodate the rapid growth of bones, tendons, ligaments and muscles.

Regular musculoskeletal posture screening is vital at this stage of development as muscular imbalances can hinder training, lead to long term injury and jeopardise a high-performance career.

Ancillary capacities continue to develop including those from Learning to Train phase and introducing:

- Dynamic flexibility warmups, mental imagery and visualisation
- Tactical understanding and development, accepting rules and role of officials in a sporting manner, appropriate procedures to understand and appeal an official decision

- Recovery strategies, sleep patterns, nutrition for recovery
- Pre- competition and competition experiences
- Environmental awareness and understanding

Training still takes preference over competing as too much competition wastes valuable training time, but the right balance needs to be found to ensure that application of learnt tactics, techniques and decision – making skills is practised under realistic competition conditions.

Specific training takes place 6 – 9 times per week, with single / double periodisation.

Focus remains on learning process not the results outcome.

Lastly, the emotional maturity will play a great part during this stage with peer influence still being a very powerful force at this age, so it is important that the group is strong and positive and continual goals setting is stressed.

Parental understanding of LTAD and emotional burn out is very important.

5. Training to compete – for males 16-23, females 15-22

In this stage athletes can only excel in one sport – they are ready to focus on optimising training and competitive abilities, they need to commit to high – intensity training throughout the year in order to maximise their sport specific skills and physical capacities.

All aspects of Training to Train phase must be attained prior to the onset of the Training to Compete phase.

Specific training takes place 9 – 12 times per week, with topics such as nutrition, sports psychology, recovery and regeneration, injury prevention and management being introduced as well as sport specific physical conditioning, technical and tactical development, following single, double or triple periodization.

This stage maximises all of the physical, mental, cognitive and emotional capacities of the athlete as by the age of 16 the brain will have reached its adult size but continues to mature neurologically for several more years with final skeletal maturation being at 19-20 in females, 22-25 in males.

Critical / tactical thinking skills are developing, with lateral and logical thoughts and ability to reason.

In training emphasis is on individual preparation with consideration of strengths and weaknesses assessed on individual basics, consistency to deliver high performance in both training and competition, competitive skills to be performed in training.

Athletes develop a need to be self- directed and independent, major decisions will be made on career, education and lifestyle, interactions with opposite sex will become a strong priority with lasting relationships developing so professional guidance should be made available.

It is important to emphasise that girls may experience emotional disorders more than the boys and are generally more likely to experience depression and much greater anxiety about friendships (this may sometimes lead to inability to continue participation in a set environment) and therefore stable, positive image is very important, and parents need to be aware of LTAD and emotional burn out.

6. Training to Win – for males 19+ and females 18+

In this stage athletes lifestyle become a performance lifestyle – the specialisation of skills and excellence in performance development – athletes train to peak at major competitions; training is a balance of the correct intensity in relation to training volume throughout the season; perfectly periodised recovery and regeneration strategies with multiple periodization providing the preparation framework in order to peak for key events.

The improvements based on individual growth and development become insignificant – training should focus on the development of stamina, strength, speed, skill and suppleness.

Physiologically the body reaches maturity; final skeletal maturation occurs in females about 19-20 years and in males about 3 years later.

Specific training takes place 9-15 times per week with equal advanced emphasis on physical, mental, tactical and technical aspects of performance based on individual needs of each athlete; ancillary capacities are complete and utilised at all times forming a performance lifestyle.

Athletes are capable of self-analysing, correcting and refining skills with winning becoming the major objective as athletes need to be treated with respect and given satisfying and knowledgeable answers throughout training programme.

Frequent breaks should be allowed to avoid mental and emotional burnout.

Throughout this stage major decision will be made on career, education and further lifestyle including Retention and Retirement as an athlete career comes to an end.

7. Active for life – any age

In this stage physical activity is engaged for improved health, mobility, longevity, fun and games or for competitive reasons.

This phase will have a whole range of participants with different neurological levels of development as there are few ways to enter this stage:

- Having finished the stage of physical literacy and deciding not to follow the competitive pathways
- Having retired from the high-performance training and competition stream
- Possible transferring from one sport to another or enjoying a wide range of sports

- Transferring to less pressure competitive events such as mass participation or masters competition

It is recommended that the physical activity takes place 3 -5 times per week for the duration of 30 - 60 minutes.

In this stage the participants will have opportunities to participate in any sport on recreational level and maintain and develop physical activity at their own rate and within their own time frame.

The retired athletes may want to continue their involvement in sport taking up coaching, officiating and/or administrative roles within sporting organisation.

WSC Coaching Team

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