LONG TERM PARTICIPANT DEVELOPMENT

Letter from President
Letter from LTPD Project Leader

Appendix One: Physical, Mental/Cognitive and Emotional Development for all the stages.
Appendix Two: Annual Programme & Implementation Guidelines.
Appendix Three: Competition Guidelines
Appendix Four: Parent Code of Conduct
Appendix Five: Athlete Code of Conduct
Appendix Six: Learning More about SPORT4LIFE and LTPD
Appendix Seven: Glossary

ACKNOWLEDGEMENTS

South African Baseball Union (SABU) would like to acknowledge SASCOC, its Coach Development staff, as well as Prof. Istvan Balyi (Canada) for the guidance and leadership that was given to the development and conceptualization of the Long Term Participant Development programme for South African Baseball.

The drafting of the document could not have been made possible without the encouragement and support of SASCOC, Sport and Recreation South Africa, International Olympic Committee, South African Baseball Union: Coaches Commission, Prof. Istvan Balyi (Canada), and the following SABU office bearers: Edwin Bennett (CEO), Vic Sawyer (Director of Coaches), Mike Randall (Coach-in-Residence).

We further acknowledge the core group of Coaches both from Club and School structures that have been the drivers of the Baseball LTPD program. Their far-reaching input as to how the programme can be implemented in both Club and School environments is well respected. The Core Group was made up of: Ian Africa, Neil Adonis, Mogamat Moosa, Ron Dempsey, Thabo Langa, Minister Nkebe, Naziem Boomgaard, Bill Schroeder, Ebrahim Raffie, Haydon van Rooyen, Ninian Pick, Yvonne Schalk, Raymond Sekhonyane and Elliot Sithole.

A special thanks to Baseball Canada for allowing us to glean from their LTAD-Baseball Program in order for us to conceptualize and establish the SA Baseball LTPD programme for South Africa.
The original Canadian LTAD was written by Prof Istvan Balyi, Colin Higgs, Mary Bluechardt, Charles Cardinal, Steve Norris and Richard Way (LTPD Expert Group) with Jim Groves and Designed by McAllister Media.

Executive Summary

The need for LTPD arises in part from the declining international performances of South African athletes in baseball and the difficulty other sports are having in identifying and developing the next generation of internationally successful athletes. In addition, participation in recreational sport and physical activity has been declining and physical education programmes in the schools are being marginalized.

LTPD is a vehicle for change. It differs from other athlete development models because it acknowledges that physical education; school sports, competitive sports and recreational activities are mutually interdependent.

LTPD also positively affects the quality of training and competition by taking into consideration factors such as developmental age and sensitive periods of optimal accelerated adaptation to training or optimal trainability. It builds athletic ability beginning with a foundation of fundamental movement skills and introduces fitness and sport skills at the appropriate developmental age.

LTPD stands in sharp contrast to our current sport system. Traditionally, physical education in the schools, recreational sports, and elite sport has been developed separately. This approach is ineffective and expensive. It fails to ensure that all children, including those who may choose to become elite athletes, are given a solid foundation and knowledge base – physical, technical, tactical and mental – upon which to build their athletic abilities.

LTPD is an inclusive model that encourages individuals to get involved in lifelong activity. It does this by connecting and integrating physical education programmes in the school system with the elite sport programmes and with recreational sport programmes in the community. LTPD ensures that all children correctly learn the fundamental movement skills – since all children attend school – and that these skills are introduced during the optimum point in their physical development, that is prior to age 11 for girls and age 12 for boys.

Children who are physically educated in the LTPD way will feel confident and be encouraged to continue to build on these skills through competitive and recreational sport activity. They will enjoy overall health benefits by developing greater physical literacy that encourages them to be more physically active throughout their lives. Increased activity reverses the current trends in childhood and adult obesity and cardiovascular disease.

This document describes a model of Long-Term Participant Development (LTPD), a training, competition and recovery programme based on developmental age (the maturation level of an individual) rather than chronological age. It is athlete...
centered, coach driven, and administration, sport science and sponsor supported. Participants that progress through LTPD experience training and competition in programmes that consider their biological and training ages in creating periodized plans specific to their developmental needs.

LONG-TERM PARTICIPANT DEVELOPMENT

LTPD can be regarded as securing the best attributes of young growing athletes throughout their lifespan within sport. LTPD ensures that optimal training, competition, and recovery programmes are provided throughout a participant’s career. It provides an optimal competition structure for the various stages of a participant’s development. It has an impact on the entire sport continuum, including participants, parents, coaches, schools, clubs, community recreation programmes, provincial and regional sport organizations, national sport organizations, sport science specialists, municipalities and several government departments (particularly not exclusively in portfolios of health and education) at the provincial/regional and national levels. It integrates elite sport, community sport and recreation, school sport and physical education at school. It recognizes international best practices, research and normative data. It supports the goals of South African Sport Policies and reflects a commitment to contribute to the achievement of these goals. It promotes a healthy, physically literate nation that participates in lifelong physical activity.

INTRODUCTION

What is LTPD?

The LTPD model is predicated on the idea that each participant’s stage of physiological, mental/cognitive, and emotional development must be identified and taken into account when developing his/her optimal training, competition and recovery programme. It is inclusive of the principles that underpin the LTPD and are equally applicable to people of all ages and abilities whether they are participating in elite sport or recreational physical activity.

This model represents a paradigm shift, a philosophically different approach to sport and physical activity. One of the goals of the LTPD model is Physical Literacy, as well as achieving a full sport system of alignment and integration. Physical literacy is defined as the mastery of fundamental movement skills and fundamental sport skills. A physically literate person moves with poise, economy and confidence in a wide variety of physically challenging situations, and is perceptive in reading all aspects of the physical environment. He/she anticipate the movement needs or possibilities, and responds appropriately with intelligence and imagination. (Whitehead, 2001)

The remainder of this chapter is devoted to explaining the model and its potential for enhancing our enjoyment of sport and physical activity.
To better understand the LTPD model, and its role in helping participants to achieve these goals, we have identified ten key factors that influence the model and set it apart from other long-term development models. These factors are outlined in the following section.

**Figure 1.**

**South African Sport for Life**

To best assimilate these different schematically illustrated stages of the LTPD model, we have to ask very pertinent questions with reference to the people that allow our sport to be played, those who support and govern the sport as well as the facilities where the sport is played.
Where are we now?

This question needs to be defined along the following Five pillars:

- Athletes
- Coaches
- Officials
- Parents
- Facilities

Where do we want to be?

This question needs to be defined along the following Five pillars:

- Athletes
- Coaches
- Officials
- Parents
- Facilities

Where are we now?

Athletes

Athletes have to be the centre of our focus point in the LTPD programme in Baseball. It is for this reason that coaches coach and officials administer any sport for the welfare of the athletes. There are certain dynamic influences that will determine a successful LTPD programme in Baseball. Athletes who play Baseball in South Africa possess certain attributes that can be divided into strengths and weaknesses. Both Club and School baseball coaches have identified these categories. The categories are reflected as a sample of the broad spectrum of athletes that play Baseball in South Africa, both in urban and rural areas. These categories are not specific to a particular Region in South Africa but rather tend to give an overview to what Baseball administrators, Education Departments, Health Departments and Sports Departments must take into consideration when designing baseball programs in certain areas.

Strengths

- There are large numbers of playing youth in certain Baseball playing regions
- We find good physical attributes in players
- We find enthusiastic and highly motivated athletes
- We find a high level of individual development in certain athletes
- In certain Regions there is a healthy display of competition
- There is strong parental involvement and support in some regions
- There is a strong wave of 2nd generation players who display good playing skills.
Weaknesses

- Many of our athletes, both young and older are in a poor physical condition
- They display poor technical and movement skills
- At times distinct mental weaknesses are also displayed
- We experience a loss of players due to an ‘academic bursary’ encroachment from other sports
- Because of the minimal media exposure we experience a lack of knowledge of the game throughout our society
- We find a high rate of attrition at teenage level and older
- Social injustices of the past have allowed for huge regional discrepancies
- Aggressive parental influence (90%) is found to be a negative influence in children
- The lack of a transport system, impacts negatively, where family transport is not available to and from disadvantaged areas.
- The majority of persons involved in Baseball focus on outcome and results with little or no thought for the process of development of the athlete.
- The majority of our nation is under-nourished with very poor nutritional knowledge
- We are able to observe on a daily the lack of positive early development
- Socio-Economic factors play a huge role in determining the success of LTPD

Coaches

Coaches to the game of Baseball are normally divided into those who have played the game in their youth and those who have not played before. Those who have not played usually come from parents who have children and school teachers, who have learners that play.

Strengths

- Most coaches show a distinct passion for coaching Baseball.
- We have a limited number of knowledgeable and dedicated coaches
- Coaching courses are allowing exposure for a wider base of coaches to emerge
- A Mentor Coach Participation program (in certain regions) has proved extremely successful
- Certain Regions have a larger per capita number of coaches to athletes, than other regions.
- Coaching Commissions are being established in all Regions
- Accreditation of Coaches has led to a larger respectability towards coaches
- Women involved in coaching in our Schools System has greatly enhanced the acceptability of sport for all

Weaknesses

- We Lack qualified and knowledgeable coaches
- No development pathway for improvement of knowledge
- No structured evaluation of coaches
• Courses not outcomes based
• No uniformity in techniques
• Outdated manuals
• Coaching commission not functioning
• School and Club programme alignment
• Outcomes based
• No national disciplinary code of conduct
• Players are outgrowing coaches
• Lack of people skills
• Lack of knowledge of growth, development and maturation (puberty)
• Do not teach fundamentals of the game
• Lack of knowledge on sports injuries
• Lack of knowledge of planning and periodization
• No baseball coaching seminars
• Do not encourage and promote parental involvement

Officials

• The right person for the right job
• Focused role for 1 person (one man - one hat)
• Establish transparency at National, Regional and Club level
• Establish professionalism through education
• Rationalisation of officials’ selection and appointments
• Paid officials
• Recognition of officials
• Independent administration of all commissions
• Ensure succession plan for officials
• Ensure an increase of all officials
• Establish a communication policy

Strengths

• Core of dedicated and passionate volunteers

Weaknesses

• Lack of qualified officials
• Overuse and burnout
• Reluctance to change
• Over competitive for own personal gain (me, myself and I)
• Own private agendas
• Umpires’ lack of knowledge of rules
• Lack of game command and training
• Lack of funds/rewards and recognition
• Need to be more ‘hands on’
• Administrators making technical baseball decisions
• No forward planning
• Competition calendar is not planned (all competitions)
• Need for accountability and transparency
• Lack of communication
• Lack of marketing strategy; regional and national
• Lack of professionalism in management

Parents

• Inform parents (Parent’s Guide)
• Reduce financial burden on parents
• Inclusion of parents in the development of the athletes
• Purchase of baseball equipment should be tax deductible (all SA sports)
• Encourage parents to be volunteers
• Establish a Parent Code of Conduct (refer to Appendix 2 of Parent’s Guide)

Strengths

• Good support from some parents in club system
• Parents giving back to the system
• Form volunteer base for clubs

Weaknesses

• Lack of support (across the board)
• Tendency to use baseball facility as a ‘crèche’
• Lack of interest
• Over involvement by hyper-active parents
• Lack of baseball knowledge
• Financial pressure
• Social-cultural differences
• Lack of exposure to the game

Facilities

• Establish ballparks up to international standards in each region
• Increase the number of properly built baseball facilities in each region
• Intensive Training Centres (ITC’s) should be suitably equipped
• Independent managed facilities owned by the Federation/Club
• Access to ‘gym’ facilities
• Establish indoor facilities
• Improvement of facilities to produce High Performance athletes

Strengths

• Some clubs have fields & clubhouses

Weaknesses

• Lack of support from Local Authorities
• Lack of facilities in certain areas
• Lack of quality baseball parks
• Shared facilities with other sporting codes
• Lack of floodlight facilities
• No indoor facilities
• Lack of funding
• Lack of equipment on demand
• Lack of gym/medical support

**Where do we want to be?**

**Vision of the Sport:**

It is important for the South African Baseball Union (SABU) to have a clear vision as to where it is heading and how LTPD fits into this vision. This vision must be the guiding pathway along which Athletes and Baseball Officials will travel to achieve the success within the framework of SABU’s authority.

The vision is coupled with major changes to the playing of baseball as is currently exercised in South Africa. This leads us to introduce and meet a measure of LTPD education for both Athlete and Official if we are to fully benefit from the program.

**Athletes**

• To provide LTPD Pathway for South African Baseball
• To provide programmes to recruit athletes
• To provide adequate, long term, support for HP Athletes (scientific, financial, career development)
• To provide proper periodization for all stages of LTPD
• A new, proper competition structure for all stages of LTPD
• To have long term focus on junior development
• To give athletes recognition, based on merit
• To establish proper communication to and from the athletes
• Establish a Baseball Academy (National Baseball Academy)
• Establish a monitoring process
• Establish Provincial Academies
• Know the National Anthem
• Establish a Baseball Sport School in each province
• Establish an Athlete’s Code of Conduct
• Expose to more International games
• Increase competition ratios
• Establish semi-professional league
• Re-establish recruitment programs for youth athletes (MLB’s Pitch, Hit and Run)
• Recognise player representation
Coaches

- To develop a proper education system throughout baseball (also in tertiary)
- To provide adequate and long-term funding for High Performance Coaches
- To have a proper monitoring system in place
- To ensure quality coaching in all stages of LTPD
- To establish Long Term Coach Development
- To give recognition to all contributing coaches
- To establish a Coaches' Commission: both Regional and National
- To establish proper communication and administration at National, Regional and Club level
- School coaches to be integrated within Coaching Commissions
- Coaches must subscribe to Code of Conduct (refer to par. 3 of Parents Guide)
- Establish a national coaching program
- Enrol and complete 'First Aid Course'

Officials

- The right person for the right job
- Focused role for 1 person (one man - one hat)
- To establish transparency at National, Regional and Club level
- To establish professionalism through education
- Rationalisation of officials' selection and appointments
- Paid officials
- Recognition of officials
- Independent administration of all commissions
- Ensure succession plan for officials
- Ensure an increase of all officials
- Establish communication policy

Parents

- Inform parents (Parent’s Guide)
- Reduce financial burden on parents
- Inclusion of parents in the development of the athletes
- Purchase of baseball equipment should be tax deductible (all SA sports)
- Encourage parents to be volunteers

Facilities

- Establish ballparks up to international standards in each region
- Increase the number of proper baseball facilities in each region
- Intensive Training Centres (ITC's) should be suitably equipped
- Independent managed facilities by the Federation/Club
- Access to 'gym' facilities
• Establish indoor facilities
• Improvement of facilities producing HP athletes

**How are we going to get there?**

• Design and develop a LTPD Strategy for South African Baseball (2011)
• Establish infrastructure and programmes to align to national, regional and club (2011)
• Establish and implement a Marketing Strategy for sponsors/stakeholders (2011-2015)
• Implement a communication strategy to deliver LTPD to all stakeholders in Baseball (2011-2015)
• Ensure that Regions encourage their clubs to subscribe to the LTPD model and program to meet the different age levels (2011-2015)
• Encourage all baseball-playing schools to follow the LTPD model within the schools physical education periods at Basic Education phases (2011-2014)

**Implementation process**

The philosophy behind Long Term Participant Development is that it takes 8-12 years of training and practice for a player to reach elite levels (Bloom, 1985; Ericsson et al., 1993; Ericsson and Charness 1994), and that success comes from training, practicing and competing well over the long term, rather than focusing on winning in the short term. There is no short cut to success in player preparation!

The LTPD Model not only provides the rational justification for enhancing our current system, but also provides some of the solutions as to the way forward, in starting to tackle some of the weaknesses identified. Talent Identification and Development must look beyond the short-term solutions and instead plan for the future. These are great challenges for our sport.

Baseball is a team sport that demands individual skill development. This development of skills needs to become prevalent at a very early age. It allows for hand-eye coordination as well as flexibility of body movement as a result of the implementation of the various components that the game demands. It has to be realized that the acquisition of skills is depended on practice as well as maturation levels. The acquisition of skills and the natural ability to master such skill will determine the positions where an athlete is to play. This acquisition of skill and natural ability is also dependant on the natural growth and development of the young athlete.

In order for South African Baseball to forge ahead with LTPD in mind, it will have to ensure that the following is adhered to in all its structures:

- Implement new communication pathway plan
- Improve current structure
- Goals stated in SMART format (Doran, G.T., 1981)
  - S – Specific
  - M – Measurable
The Ten Key Factors Influencing LTPD

1. The Fundamentals - Developing Physical Literacy

Fundamental movement skills (ABC’s, running, throwing, catching, hopping, bounding, etc.) and fundamental sport skills equals Physical Literacy. The literature on growth and development indicates that children should master the fundamental movement skills and fundamental sport skills before learning more complicated sport-specific skills and strategies. These fundamental skills should be acquired prior to the onset of the growth spurt that occurs in adolescence.

The physical and movement qualities that are developed as physical literacy are essential for participation and enjoyment of sports. Athletics, gymnastics and swimming are three sports that are particularly useful for developing fundamental movement skills and sport skills.

Athletics:
Develops many of the fundamental movement skills which are components of all other sports, including running, jumping, throwing and for wheelchair participants, wheeling.

Gymnastics:
Gymnastics encourages the development of agility, balance, coordination, and speed, along with the fundamental movement patterns of landing, statics, locomotion, rotation, swings, springs and object manipulation.

Swimming:
Is the foundation for all water sports? It is also important for water safety reasons, and teaches balance in a buoyant environment as well as coordination.

2. Chronological Age versus Developmental Age

A second factor influencing the LTPD has been touched upon earlier. It is the recognition that chronological age differs from developmental age. Chronological age refers to the number of years and days elapsed since birth. Developmental age refers to the child’s relative position on a continuum that begins at birth and culminates in full physical maturity.

A participant’s developmental age determines when various aspects of sport and physical activity should be introduced or emphasized. The LTPD model uses the categories "early", "average", "on-time" or "late" matures to identify an athlete's
developmental age. These designations help coaches and instructors to design instructional, training and competition programmes that are appropriate for the participant's level of development. Identifying an athlete's stage of maturation is not difficult. For specific information on "how to", go to www.Ltad.ca. The Role of Monitoring Growth in LTAD or check SABU’s Parent’s Guide (page 12, Figure 4). As individuals mature, there are several time sensitive periods when there is accelerated adaptation to training. The model identifies these periods and makes maximum use of them to introduce skill and fitness development.

3. Mental, Cognitive and Emotional Development

Instructors and coaches should recognize that individuals mature at different rates and that the timetable for physical, mental, cognitive and emotional development varies from athlete to athlete. Instructors and coaches are encouraged to take a holistic approach to teaching and training athletes. This means taking into account a wide variety of psycho-social and emotional factors that influence the athlete day-to-day.

Cognitive, mental and emotional (affective) elements have a significant effect on participants' performance, and must be prioritized in long-term participant development. Beyond these elements, instructors and coaches should also consider equipment and environmental factors that impact participation, performance and safety. Ethics, including fair play, respect of self and others, and perseverance should be developed within all stages of long-term participant development. Appendix of tables.

4. Specialization

Many of the world’s most successful athletes participated as children in a wide variety of sports and physical activities. The movement and sport skills they developed as a result have helped them to attain a high level of athletic achievement.

There is much to be gained from a child's early participation in a variety of sports. Early exposure to a wide variety of sport and physical activities will develop some of the physical and movement attributes that are crucial to later success in participation including: agility, balance, conditioning, speed, core body strength, stamina, suppleness, and eye-hand-foot coordination.

Early specialization in baseball can contribute to:

- Over emphasis on sport specific preparation/ one-sided preparation
- Lack of development of basic movement and sport skills
- Overuse, injuries
- Early burnout
- Premature retirement from training and competition
5. Trainability

- The trainability of the 5 S’s:
- Stamina (Endurance)
- Strength
- Speed
- Skill
- Suppleness (Flexibility)

This is well documented in the following literature. (Brohms, 1985; Viru et al, 1998 and 1999; Rushall, 2000.) Biological markers (Balyi, 2002), such as the on-set of PHV (adolescent growth spurt), PHV and the on-set of menarche can identify the “sensitive periods of accelerated adaptation to training” for Stamina, Strength and Skills. The trainability of Speed and Suppleness is based on chronological age. Thus, the biological markers will identify the “windows of optimal trainability for accelerated ‘adaptation to training. (See further details on trainability in the 10S’s of training and performance section)

6. Periodization (Annual training, competition and recovery plan)

Periodization provides the framework for organizing training, competition and recovery into a logical and scientifically based schedule to achieve optimum performance at the required time. A periodized annual plan that takes into account growth, maturation and trainability principles should be developed for all stages of LTPD.

Simply put, designing a periodized yearly plan is time management. This involves planning the right activities with the correct level of difficulty, in the correct sequence to reach the desired training and competition objectives.

The plan can be broken down into workable units. The proper sequencing of these units is critical for success. To reach optimum performance in a competitive environment, the training units should be sequenced in the following manner:

- Develop the performance capacity of the participant including physical literacy and sport specific skills, tactics/strategies, physical components, mental skills;

- Integrate the performance factors in a complex and harmonious blend;

- Prepare the participant to perform at needs to know competitions.

In order to design an annual plan, the coach needs to know:

- How the sport specific athletic form is developed;
The requirements (demands) of the sport during competition;

The demands of the sport during the preparation phase;

The competition calendar and the relative importance or purpose of each competition;

The actual training state of the athlete at the start of the yearly plan;

The contextual reality that the coach and athlete have to cope with;

The principles of long-term participant development;

Creating a blueprint for success involves accurate and effective planning of training, competition and recovery.

7. Calendar Planning for Competition

The domestic competitive and event calendar must support and be aligned with LTPD. Different stages of development and different levels of participation have different requirements for the type, frequency and level of competition. At some stages of development, training and development take precedence over competitions and short-term success. During the later stages participants need to experience a variety of competitive situations and perform well at international and other high-level events.

National and international competition and event calendars must be coordinated, and competitions selected according to the priorities of the specific stage of development of the participants.
8. The Ten Year Rule

Scientific research in sport has concluded that a minimum of ten years, or 10,000 hours of deliberate training is needed for a talented participant to reach elite levels. This translates into an average of more than three hours of training daily for 10 years. There are no shortcuts; participant development is a long-term process (Gibbons, 2002). Short-term performance goals must never be allowed to undermine long-term participant development (Viru, 1995).

9. System Alignment and Integration

LTPD recognizes that physical education, school sports, recreational activities and competitive sport are interdependent. Enjoying a lifetime of physical activity and achieving athletic excellence are both built on a foundation of physical literacy and fitness.

Stakeholders in LTPD include participants, instructors, coaches, parents, administrators, spectators, sponsors and supporting national and multi-sport organizations. With so many partners included, system integration and alignment is a major challenge.

It is important that all components of the Baseball community – players, coaches, parents, administrators, spectators, sponsors, and supporting national, provincial, regional and multi sport organizations work together to implement the right programs and establish a system that produces optimal condition for training and competition.

The South African sport system should include the school system (physical education and school sports), sport and recreation departments, competitive sport, community mass participation sports programs; school mass participation sports programs; school educators; research and higher education; sport facilities and coaching commissions. All parts of the sport community must be integrated and aligned.

With so many partners across the country and with different demographic compositions, system integration and alignment become major challenges. Each element in the system plays a crucial role in player development. The system must be clear, seamless, and based upon a consistent set of principles, to ensure the objective of raising a well rounded, athletically sound and physically developed human being.

10. Continuous Improvement (Kaizen)
LTPD is a dynamic framework that utilizes continuous adjustments based on key principles. Continuous improvement ensures that:

- LTPD responds and reacts to new scientific and sport-specific innovations and observations and is subject to continuous research in all its aspects.
- LTPD, as a continuously evolving vehicle for change, reflects all emerging facets of physical education, sport and recreation to ensure systematic and logical delivery of programmes to all ages.
- LTPD promotes ongoing education and sensitization of all partners about the interlocking relationship between physical education, school sport, community recreation, life-long physical activity and high performance sport.
- LTPD promotes integration between sport, physical education, recreation, health and education.

The 10 S’s of Training and Performance

The original 5 Basic S’s of training and performance must be introduced in the South African SPORT4LIFE: Long-term Participant Development document. Building on the physical development, an additional 5 S’s create a complete, holistic, training, competition and recovery program and a proper lifestyle.

Thus, there are 10 S’s of training that need to be integrated when developing annual training, competition and recovery plans. Each of these capacities is trainable throughout a player's lifetime, but there are sensitive periods in the development of each capacity during which training produces the greatest benefit to each athlete/player’s improvements.

The SAS4L (South African SPORT4LIFE) document will also describe the various stages of LTPD and identify the windows of optimal trainability related to the sensitive periods of the maturation process.

Thus, windows of trainability refer to periods of accelerated adaptation to training during the sensitive periods of pre-puberty, puberty and early post-puberty. The windows are fully open during the sensitive periods of accelerated adaptation to training and partially open outside of the sensitive periods.

These sensitive periods vary between individuals, as each athlete/player is unique in their genetic makeup. While the sensitive periods follow general stages of human growth and maturation, scientific evidence shows that humans vary considerably in the magnitude and rate of their response to different training stimuli at all stages. Some players may show potential for excellence by age 11, whereas others may

“The sensitive periods in trainability are referred to the windows of accelerated adaptation to training.”
not indicate their promise until age 15 or 16. Consequently, a long-term approach to athlete/player development is needed to ensure that players who respond slowly to training stimuli are not "short-changed" in their development.

**Stamina (Endurance)**

The sensitive period for training stamina occurs at the onset of the growth spurt or Peak Height Velocity (PHV), commonly known as the adolescent growth spurt. Athletes/players need increased focus on aerobic capacity training (continuous or aerobic interval workloads) as they enter PHV, and they should be progressively introduced to aerobic power training (anaerobic interval workloads) as their growth rate decelerates. However, sport-specific needs will determine “how much endurance is enough” in a particular sport, thus minor or major emphasis of training the aerobic system will be defined by sport-specific and individual specific needs.

Athletic events can be classified into four main categories, namely, power events, speed events, endurance events and ultra-endurance events. Baseball fits into three of these categories, namely, power, speed and endurance due to the length of games. The body has four distinct power systems it can use to supply energy for
different types of events. For a coach, knowledge of the contribution of the power systems used during exercise is essential. They need to be able to assess whether their current training programmes provide the physiological stimuli necessary for superior performance. An athlete’s performance is dependent on their being able to maximize the delivery of power from the various systems involved in the event. Training then must target these systems selectively in order to enhance their function. A systematic training program involves a mix-and-match of workouts aimed at stressing the specific demands of competition. Logically this mix varies between sports, and even between individuals in the same sport but in different playing positions. Studies (Dr Jens Bangsbo 2003) have shown that the contribution to power production from aerobic sources falls off rapidly as the exercise duration increases. When simultaneous measurements of power production from both anaerobic and aerobic sources were made it was found that they changed significantly throughout the exercise. Different power systems are utilized during events of varying duration and they therefore require different types of workouts that best train those systems. Baseball is a team sport and games could vary in duration. In most games players are required to sprint at close to top speed, use explosive movements and to be active for periods between two to four hours with short periods of recovery between work bouts. Clearly these players depend on both anaerobic and aerobic power systems during the course of a game. Given such diverse activity profiles physiological requirements for success in team sports are vastly different to those in endurance events and therefore it should not be difficult to understand why team sports require distinct training and nutritional strategies for success. (Dr. John Hawley and Dr. Louise Burke 1998)

A reminder: The windows are fully open during the sensitive periods of accelerated adaptation to training and partially open outside of the sensitive periods.

**Strength**

There are two sensitive periods of trainability for strength in girls: immediately after PHV or after the onset of menarche. Boys have one strength window, and it begins 12 to 18 months after PHV. Again, sport-specific needs will determine “how much strength is enough” in a particular sport, thus minor or major emphasis of training strength will be defined by sport-specific and individual specific needs.

“The challenge for any coach is to devise a resistance training program that enhances the athlete’s capacity to meet or exceed the physical demands of their event, to an improved performance. Development of the optimal program requires careful consideration of many factors, including:

- the absolute strength requirements of the athlete’s event;
- the absolute ability of the athlete to meet these physiological requirements;
- the muscle groups utilized during the athlete’s event;
- whether the athlete’s event comprises concentric contractions, eccentric contractions, or both
- whether resistance training should be isometric, isotonic or isokinetic;
the intensity (load) and frequency of resistance training; and
- the rate of progression of resistance training.

Although there are a multitude of resistance training methods that can be used to enhance strength and performance, these can be split broadly into three categories:

1. High resistance weight training;
2. Dynamic resistance training; and
3. Plyometrics

**High-resistance weight training**

This type of training involves lifting heavy loads a relatively few times (four to six repetitions) and is based on the theory that lifting the heaviest load results in the maximal recruitment of motor units and increases in muscle size (hypertrophy) and strength. A typical session would involve three to four sets of four to six repetitions of each exercise, with a long (two to three minutes) recovery between sets. Often serious athletes will ‘split’ training sessions into upper and lower body parts, working on one or the other on alternate days. This procedure allows for adequate recovery between training sessions of the same musculature.

**Dynamic resistance training**

In contrast to high-resistance weight training, dynamic resistance training involves lifting lighter weights at very high speeds. This form of resistance training is more ‘sports-specific’ in that the athlete can perform exercise at velocities that mimic their chosen event. This type of training produces the highest power outputs of the muscles, which has been reported to result in the greatest gains in performance. A typical session might involve four sets of ten to fifteen repetitions of each exercise, with a short (less than 30 seconds) recovery between sets.

**Plyometrics**

‘The main objective of plyometrics training is to improve an athlete’s ability to generate maximum force in the shortest time’ (Coaches Dintiman, Ward and Tellez, in their book Sports Speed 2003)

Plyometrics training utilizes the acceleration and deceleration of the athlete’s body mass and gravity to overload the muscles. For example, an athlete might jump off a box, storing potential energy in their muscles, and then immediately release that energy in the opposite direction (kinetic energy) upon ground impact. The goal of plyometrics is to enhance the ability of an athlete to exert maximal force during high-speed movements. Activities that require such movements include and any team sports that involve jumping or changes of pace and/or direction at speed (e.g. baseball, basketball, football, diving, and volleyball). Typically, plyometrics Profills involve activities such as jumping or bounding, in which there is a rapid rate of
stretch of the muscles involved in the activity." (Dr. John Hawley and Dr. Louise Burke 1998)

A reminder: The windows are fully open during the sensitive periods of accelerated adaptation to training and partially open outside of the sensitive periods.

**Speed**

There are two sensitive periods of trainability for speed. For girls, the first speed window occurs between the ages of six and eight years, and the second window occurs between 11 and 13 years. For boys, the first speed window occurs between the ages of seven and nine years, and the second window occurs between 13 and 16 years. During the first speed window, training should focus on developing agility and quickness (duration of the intervals is less than five seconds); during the second speed window, training should focus on developing the anaerobic alactic power energy system (duration of the intervals is 10-15 seconds).

It is highly recommended that speed should be trained on a regular and frequent basis, for e.g., at every training session as part of the warm up. Towards the end of the warm up or immediately after the warm there is no Central Nervous System or metabolic fatigue present in the organism, and so this is an optimal time to train speed. The volume of training should be low and allow full recovery between exercises and sets. Short acceleration with proper posture and elbow and knee Profive, take-off speed and segmental speed should be trained regularly outside of the window of optimal trainability for speed. In addition, proper blocks of training should be allocated to speed training during the periodized annual training, competition and recovery program according to seasonal and the sport-specific requirements.

A reminder: The windows are fully open during the sensitive periods of accelerated adaptation to training and partially open outside of the sensitive periods.

**Skill**

Girls and boys both have one window for optimal skill training. For girls, the window is between the ages of eight and 11 years, while in boys it is between nine and 12 years, or more precisely before the onset of the growth spurt. During this window, young athletes should be developing physical literacy. Physical literacy is the development of fundamental movement skills and fundamental sports skills that permit a child to move confidently and with control, in a wide range of physical activity and sport situation. It also includes the ability to “read” what is going on around them in an activity setting and react appropriately to those events. Physical literacy is the foundation of life-long involvement in physical activity and also for high performance participation.

A reminder: The windows are fully open during the sensitive periods of accelerated adaptation to training and partially open outside of the sensitive periods.
Suppleness

The sensitive period of trainability for suppleness occurs between the ages of six and 10 years in both girls and boys. However, because of the rapid growth special attention should also be paid to flexibility during the growth spurt.

A reminder: **The windows are fully open during the sensitive periods of accelerated adaptation to training and partially open outside of the sensitive periods.**

Structure / Stature

This component addresses the six stages of growth in the human body linking them to the windows of optimal trainability:

- Phase 1: very rapid growth and very rapid deceleration;
- Phase 2: steady growth;
- Phase 3: rapid growth;
- Phase 4: rapid deceleration;
- Phase 5: slow deceleration;
- Phase 6: cessation of growth

It recognizes stature (the height of a human) before during and after maturation guiding a coach or parent to the measurements needed to track growth. The tracking of stature as a guide to developmental age allows planning to address the **sensitive periods** of physical (endurance, strength, speed and flexibility) and skill development. Diagnostics to identify individually relevant sensitive periods of accelerated adaptation to training is essential to design and implement optimal training, competition and recovery programmes (page 12, Figure 4 of Parent’s Guide).

(p)Sychology

Sport is a physical and mental challenge. The ability to maintain high levels of concentration, remain relaxed with the confidence to succeed are skills that transcend sport to everyday life. To develop the mental toughness for success at high levels requires training programmes that are designed specific to the gender and LTPD stage of the athlete. The training programmes should include key mental components identified by sport psychologists; concentration, confidence, motivation and handling pressure. As an athlete progresses through LTPD stages the mental training aspect will evolve from: having fun and respecting opponents; to visualization and self-awareness; to goal setting, relaxation and positive self-talk. To master the mental challenge of sport those basic skills are then tested in increasingly difficult competitive environments. Ultimately the planning, implementing and refining of mental strategies for high level competition will determine podium performances. The mental training programme is critical at any LTPD stage, as
dealing with success and failure will determine continuation in sport and physical activity, therefore dramatically affecting an individual lifestyle.

**Sustenance**

Sustenance recognizes a broad range of components with the central theme of replenishing the body. This is to prepare the athlete for the volume and intensity required to optimize training or living life to the fullest. Areas addressed are: nutrition, hydration, rest, sleep and regeneration, all of which need to be applied different to training (life) plans depending on the stage within the LTPD. Underlining sustenance is the need for optimal recovery management moving the athlete to the 24/7 models that places a high degree of importance on the individual’s activities away from the field of play. For proper sustenance and recovery management there is a need to monitor recovery by the coach or parent through the identification of fatigue. Fatigue can come in many forms including: metabolic; neurological; psychological; environmental and travel. While over training or over-competition can lead to burnout, improperly addressing sustenance can lead to the same result.

**Schooling**

In training program design the demands of school must be considered. This is only limited to the demands placed on individuals by school sports or physical education classes. This includes integrating school academic loads, duties, school related stresses, and timing of exams. When possible, training camps and competition tours should compliment, not conflict, with the timing of major schools academic events.

Overstress should be monitored carefully. Overstress refers to the everyday stresses of life, like schooling, exams, peer groups, family, boyfriend or girlfriend relationships as well as increased training volume and intensities.

Interference from other school sports should be minimized, communication between coaches who are responsible to deliver the training and competition programs are essential. A good balance should be established between all factors and the coach, educator and the parents should be working on this together.

**Socio-Cultural**

The socio-cultural aspects of sport are significant and must be managed through proper planning. South Africa has a tremendous need for the transformation of sport to all sectors of its society. Our Regional Federations and clubs must at all times seek to make our sport equally accessible to all members of our country. Socialization via sport will ensure that general societal values and norms will be internalized via sport participation. This occurs at the community level and as an athlete progresses through the LTPD stages it can lead to International exposure. This socialization can be broadening of perspective including ethnicity awareness and national diversity. Within the game travel schedule, discovery can include education of competition location including history, geography, architecture, cuisine, literature, music and
visual arts. Proper annual planning can allow sport to offer much more than simply commuting between hotel room and field of play. Sport socialization also must address sport sub-culture. As well, coaches and parents must guard against group dynamics that create a culture of abuse or bullying. Ethics training should be integrated into training and competition plans at all stages of LTPD.

Overall socio-cultural activity is not negative distraction or interference with training and competition activities. It is a positive contribution to the development of the person and the athlete.

Children often choose to play a sport after the optimal windows of trainability for speed, skill, and suppleness have passed. These children are therefore dependent on schools, recreation programmes and other sports to provide timely training in these capacities. LTPD advocates that sports build relationships with these organizations to promote and support appropriate training. If athletes miss these training periods entirely, coaches will need to design individualized programs to remedy any shortcomings.

**Building a Pathway: The Seven Stages of LTPD**

The stages of LTPD are based on the concept that sports can be classified as early or late specialization sports. Early specialization sports are defined as those sports where early specific training is essential to be successful, such as gymnastics, rhythmic gymnastics, diving, figure skating, swimming and table tennis.

Late specialization sports are defined as those sports when early specialization is not required to achieve excellence. Theses sports include baseball, athletics, soccer, rugby, volleyball, combative or racquet sports, where early specialization is not essential or recommended for future excellence.

Long-term Participant Development distinguishes seven stages of athlete development:

1. Active Start – 0 - 6 years of age
2. FUNdamentals Females 6 - 8 / Males 6 - 9
3. Learn to Train Females 8 – 11 / Males 9 - 12
4. Train to Train Females 11 – 15 / Males 12 - 16
5. Train to Compete Females 15 - 22 / Males 16 - 23
6. Train to Win Females +/- 22 / Males +/-23
7. Active for life – Enter any time

**STAGE ONE: ACTIVE START**

**Ages:** 0 to 6 years (female and male)
Objectives: The objective of the stage is to learn fundamental movements and link them together into play. Physical activity should be fun and a natural part of a child’s daily life. Active, free play is the way young children are physically active.

Baseball does not have a direct role during the Active Start stage other than to support organizations that promote physical activity and physical literacy.

STAGE TWO: FUNDAMENTALS

Ages: Females 6-8, Males 6-9 years of age

At the entry level or FUNdamentals stage of LTPD the children begin the journey by being introduced to baseball at school through exposure to the teaching resource, Playground Markings and other grassroots initiatives. During this phase, which lasts approximately 2 to 3 years, children can try the sport out and get a basic understanding of catching, hitting, fielding and throwing skills. Those who are identified as having either a more genetic disposition to the game or show keenness will in future be introduced to an accredited local club which will provide the opportunity for more focused development. The emphasis during this Fundamentals phase will be on fun and participation. It will aim to develop crucial physical capacities such as agility, balance, co-ordination and speed (ABC’S) alongside basic baseball-specific skills. The children will be encouraged to participate in as many other sports as possible.

Early maturing athletes are undoubtedly better athletes during childhood; however, research strongly suggests that late maturing children may have greater potential to reach elite levels in the long term. They are likely to benefit from spending longer in the important early stages that pattern future physical literacy.

Coaches must encourage a positive perception of the activities and of the children themselves. They must create a non-judgmental and unthreatening atmosphere where equal praise is given for all forms of effort and no obvious “school-associated” learning is present. It is important that the children have a positive early experience of baseball if they are to develop a future love for the game. Basic baseball related skills such as batting, fielding, catching, throwing, sliding and diving are starting to be patterned during this phase.

STAGE THREE: LEARN TO TRAIN

Ages: Females 8 - 11, Males 9 – 12 years of age

As the players grow and develop they enter the Learn to Train. Towards the end of this phase children will likely be playing some formalized baseball matches through either District competition, their Clubs, their Regional age group teams or through school competitions. Coaches should ensure that players aim for a minimum ratio of 2 practice sessions per game during the season if skills are to become more proficient. The range of maturation is likely to be wide during this phase. Players should concentrate on building upon competencies learnt during the Fundamentals stage, including motor skill and co-ordination development, with an emphasis on further development of safe and sound batting, pitching, fielding and catching skills. Whilst
players are learning to be become better athletes and players all programmes should be fun and activity based.

Players are introduced to general physical conditioning and an awareness program to highlight the importance of physical development for future success in baseball.

Coaches need to be positive role models by helping shape the correct values and beliefs. Encourage positive attitudes when faced with challenges and help form coping strategies for winning and losing. It is important that both players and coaches place a positive emphasis on the link between physical conditioning and baseball success. This phase is likely to pattern a youngster’s future attitude toward training and how being fit helps both achieve high performance on the baseball field and leads to a healthier lifestyle.

**STAGE FOUR: TRAIN-TO-TRAIN**

**Ages:** Females 11 – 15, Males 12 - 16 years of age

This is a critical stage of LTPD. Many of the important physical attributes will be shaped over the next 4 or 5 years. The window of opportunity (refer to Trainability diagram) to train stamina, speed, and strength exists during the Training to Train phase in addition to maintaining the ABC’s and exploring further more specific baseball skills. This stage is about “Building the Engine”.

The most talented players are likely to be selected to play Regional & Provincial baseball during this stage where they will be competing against the best players from other parts of the country at U14 and U16 level. Towards the end of the phase they will likely take the important first steps into adult baseball.

It is vital that levels of competition and involvement in other sports are monitored, if the right balance to assist peak performance is reached. Coaches should aim for a minimum 1:1:1 ratio of play: practice: rest during the season with aspirations towards a 1:2:1 type of ratio. This will mean effective communication between the different interested bodies to ensure that the system remains “player-centered”. (Matches should not outnumber practice)

It should be remembered that between the ages of 12 and 14/15, the most talented performers might only have 30-40 “meaningful” games in which to impress selectors from league and private academies. Whilst match performances will not be the only criteria for selection, they clearly take on greater significance as the player develops towards the end of this phase. There is a responsibility on all those associated with that player to ensure that he or she has the ratio of play, practice and rest to give them the optimum chance of performing to their peak each time they play.

 Whilst it remains important that players continue to play other sports, for variety and cross training, the balance during this phase is now firmly toward baseball. (Other sports should include table tennis, tennis & field hockey)

Careful monitoring of the growth of the player is critical during this phase using simple height and weight measurements and visual assessment, to ensure that the most
appropriate training is introduced at the most appropriate time. Specialization in a position (batting, pitching, fielding, and catching) should begin towards the end of this stage.

**STAGE FIVE: TRAIN TO COMPETE**

**Ages:** Females 15 – 22 +/-, Males 16 – 23 +/-, years of age

By the age of 16 for boys and 15 for girls, the players will enter the Training to Compete stage. During this stage they will further develop their baseball skills, including technical and tactical work in competitive situations. Coaches will need to place a strong emphasis on autonomy and independence as well as creating the right environment for mastery of technique and mental toughness to develop.

Individually tailored physical and mental development programmes are an integral part of improving performance in most sports.

Players will either be playing school, clubs and/or provincial age group baseball. Prioritization of competition and suitable play, practice and rest ratios will need to be considered. It is important to establish a Provincial and National U18 squad to provide adequate competition at the elite level. This will offer more retention of promising athletes at this level.

During this phase important transition points take place. It will be important for coaches to consider appropriate training and practice regimes to ensure that players retain a balanced lifestyle during this important time.

**STAGE SIX: TRAIN TO WIN**

**Ages:** Females 22 +/-, Males 23 +/- years of age

The Training to Win stage should see players have most of the capacities in place to perform at a high level. There should be a focus on team dynamics. The maintenance of physical attributes appropriate to the performer’s skill requirements and further development of match specific skills take place. For top provincial players the training year will be divided into a double periodization while an international calendar may result in multiple periods of periodization for the national team program.

**STAGE SEVEN: ACTIVE FOR LIFE**

**Enter at any age**

**Age:** This is when an individual makes the transition from competitive sport to life-long physical activity, and it may occur at any age.

**Objective:** Continue to be physically active in baseball or in any other sport. Continue to be involved in the baseball community at different capacities.
This stage describes the transition from competitive sport to lifelong physical activity. The sport system should encourage participants to move from one sport to another with ease and from one aspect of sport to another. Active for life may also involve moving from competitive sport to:

- Recreational activities such as running, swimming, hiking, cycling, etc.
- Lifelong competitive sport through age group competition such as Master’s Games
- Sport-related careers, such as coaching, officiating, sport administration, small business enterprises, or media
- Volunteer positions, as coaches, officials, or administrators.

Training, racing and recovery programmes should fit the needs of the athletes for whom they are intended. Masters players need programmes that take into account how aging affects strength, flexibility and endurance.

A positive experience in sport is the key to retaining participants after they leave the competitive stream. Sport can begin a philosophical shift.

**LTPD and the female athlete**

Baseball in South Africa has suddenly been inundated with the request from girls to play Baseball. This is a direct policy of Sport and Recreation South Africa on equality immaterial of gender. This new dynamic in SA Baseball has come about as a result of the introduction of Baseball through Major League Baseball’s Pitch, Hit & Run. This PH&R program was the leverage to get many Primary Schools to play Baseball throughout South Africa. The converse of this initiative was that we also developed a new group of Baseball athletes – the Female athlete.

While many male dominated Regions thought it would just be a phase, it has come to stay and a dynamic that the South African Baseball Union has to do deal with more aggressively and allow more females to play Baseball.

The latest initiative by the International Baseball Federation (IBAF), to encourage females to play Baseball on an International front, puts our course and purpose for females to play Baseball right on track.

While it may seem to be just the inclusion of females into Baseball to play like males, it brings with it a new dynamic paradigm shift – all with its own coaching ethics, stages of development, training constraints, and safety regulations.

**Female baseball in South Africa is here to stay!**

**LTPD for Athletes with Physical Disabilities**
South Africa has not as yet ventured as an act of responsibility into a LTPD programme for Athletes with Physical Disabilities. It is going to have to be a concerted effort for this to happen because of the very special needs of this sector of our society.

**Strategic initiatives:**

**Planning to Implement (LTPD initiatives implementation plan)**

**Clubs and Club Development**

Clubs will play an important part in delivering any new system. It is proposed that the roles and responsibilities are as follows:

- Clubs, as part of the national baseball LTPD Club System, are to be used as the “front line” in the development process. In conjunction with Regional Federations they will be responsible for delivering the Fundamentals, Learn to Train and Train to Train phases of LTPD (from ages 6-15).
- As an increase in the number of activity hours for the talented baseball player in the training to train stage is expected, it is proposed that the clubs take up some of the “slack” and provide an additional local venue (in conjunction with Regional Federations) at which players will receive practice and training under expert tuition.
- As part of the tailored package of benefits available to such players, they will be appropriately skilled and have appropriately qualified coaches and volunteers to deliver the program.
- To support a close working relationship with local schools and their Regional Federations to ensure effective delivery of the system.
- To provide appropriate outdoor practice facilities for club development and be available to Regional Federations squads as part of a school holiday practice program if the opportunity arises.
- Club coaches to be given access to LTPD training and support programmes offered by local Regional Federations and the SABU Coaches’ Commission.
- Clubs to display “Pathway to Success” posters outlining what the LTPD process can do for the player and their route map from (Playground to the International Arena).

**Coach education and development:**

The schematic below indicates the stages of LTPD for Baseball that has to be initiated within the new approach as it relates to Coaching and Coach Education.

The role of the coach will be central to any successful introduction of a new sports system. The coach has the ability to motivate performers and either unlock and nurture or stifle future potential. Any changes to the existing system will roll out over a number of years and LTPD will progress parallel to changes to the Coach Education and Development system as and when this occurs. The role and responsibility of the SABU Coaches’ Commission and the SABU Development Commission with regard to LTPD are as follows:
- Amendments to existing Coach and Teacher education courses and Teacher Training as well as Levels Elementary, 1, 2 and 3.
- Amendments to the SABU Coaching Manuals.
- To promote and develop an awareness program for the introduction of LTPD principles.
- To design and deliver Coach Development Workshops on LTPD with special emphasis on the delivery of the Fundamentals, Learning to Train and Training to Train stages.
- To monitor progress, evaluate success and review periodically.
- To update existing coaches with the principles of LTPD and delivering it as a sports system for baseball.
- To develop and deliver further training and development packages to support the LTPD system.
- To develop a compulsory Movement Skills for Baseball Workshop for all coaches in support of the LTPD system in co-operation with a National Coaching Association.
- To develop an effective Coach Mentoring scheme.
Official's education and development

It is necessary for Baseball Officials such as Administrators, Coaches, Umpires and Scorers to be under a continual education and training process offered by the South African Baseball Union. The South African Baseball Union has several acquisition levels within the varied categories in which officials can aspire to. Some of these levels of acquisition are already given a necessary qualification under the National Qualities Framework.
In close liaison with SASCOC (responsible for accreditation in sport in the country), SABU and SETA will be responsible for seeking any further accredited education for its officials.

The correct approach to the **LTPD BASEBALL4LIFE** program is certainly going to revolutionize the way in which parents will need to see the development of their children in the sport. Coaches and other officials will have to make a concerted effort to get the very best out of the children in the way they coach children to allow for a much more lengthened and enjoyable period in the game of Baseball.

Clubs and schools where Baseball is played must make every endeavour to introduce the LTPD program. The South African Baseball Union needs to ensure that schools, clubs and Regional Federations follow the **BASEBALL4LIFE** program. It is going to be imperative for officials to vigorously pursue the methods of training exposed in this document in order for each school, club and Region to observe the full impact of the system.

It is our endeavour to allow the children of South Africa that play Baseball to enjoy themselves. Children need to live thoroughly as children while playing the sport. We had a slogan during a very vibrant school sport period in our country that gives the essence of what we are trying to achieve: “Let the Children Play”

**Baseball4life** is definitely going to have an impact on the school system in that there is definitely a demand for Physical Education to be reintroduced into the country. This places the onus on the Departments of Basic Education and Higher Education to ensure that we have learners that have acquired the skills of Sport and Physical Literacy.

Because the LTPD program for Baseball and other sport is intended to improve the health of our nation, it is going to be necessary for the LTPD programmes to interface with the Department of Health in order for the forward planning for a healthy nation that goes hand in hand with a winning nation.

**“LET THE CHILDREN LIVE, PLAY, LEARN, BE HEALTHY AND ENJOY THEMSELVES**

**SELECTED Bibliography**


www.LTPD.ca

www.canadiansportforlife.ca

APPENDIX ONE

PHYSICAL, MENTAL/COGNITIVE AND EMOTIONAL DEVELOPMENT FOR ALL THE STAGES

Fundamentals (adapted from ECB LTPD model and Canadian Sport for Life Resource paper)

Physical development:
Characteristics and implications

Basic characteristics
- Larger muscle groups are more developed than smaller ones.
The size of the heart is increasing in relation to the rest of the body. The cardiovascular system is still developing.

Ligamentous structures are becoming stronger, but the ends of the bones are still cartilaginous and continue to ossify.

Basic motor patterns become more refined towards the end of this phase and the balance mechanism in the inner ear is gradually maturing.

During this phase, girls develop co-ordination skills faster than boys but the developmental differences between boys and girls are negligible.

Performance capabilities & limitations

- Children are more skillful in gross movements involving large muscle groups than in precisely co-ordinated movements involving the interaction of many smaller muscles.
- Endurance capacity of the young players is more than adequate for most activities.
- The young person’s body is very susceptible to injury through excessive stress or heavy pressure.
- There is a great improvement in agility, balance, co-ordination and speed (ABC’s) towards the end of this phase.
- Sex differences are not of any great consequence at this stage in development.

Implications for the Baseball coach

- Basic skills should be developed during this phase.
- Short duration anaerobic alactic activities should be planned (short, sharp sprint activities 4-6 seconds with 2 minutes rest in between).
- Use slow progressions in hopping and bounding. Strength training limited only to own body weight or appropriate medicine ball (neural recruitment i.e. nervous system adaptation).
- Baseball-specific activities and games should emphasize co-ordination and kinesthetic sense. Activities that incorporate gymnastic or athletic type movements are most appropriate.
- Training and playing in combination should be emphasized at these ages and during this phase.

Fundamentals

Mental/cognitive development:
Characteristics and implications

Basic characteristics

- Attention span is short and children are action orientated. Memory is developing progressively.
- Children in this phase have limited reasoning ability. Later on during the phase there is growing capacity for more abstract thought.
- The repetition of activities is greatly enjoyed. Young players improve their abilities through experience.
- Imagination is blossoming.

Performance capabilities & limitations

- Young players cannot sit and listen for long periods of time.
Children are generally leader-orientated: they love to be led!
Young players do not learn the skills correctly by trial and error.
Experimentation and creativity should be encouraged.

**Implications for the Baseball coach**
- Use short, clear and simple instructions. Children want to move and participate. Coaches with excellent communication skills must work at this level.
- Coaches should adopt a “follow me” or “follow your leader” approach and ensure that all activities are fun and well planned. For example, take a warm up and encourage children to follow you tumble, forward roll, touch the floor/walls etc.
- Coaches must be able to provide a correct demonstration of basic baseball skills at this level. Those coaches with excellent technical modeling must work at this level.
- While playing and practicing encourage input (opinion) from the children. They will love to try things out! Create a non-judgmental environment.

**Fundamentals**

**Emotional development:**

**Characteristics and implications**

**Basic characteristics**
- The children’s self-concept is developing through experience and comments from others.
- Children like to be the centre of focus and attention.
- The influence of peers becomes a very strong Profiving force behind all activities. This should be encouraged.
- The child begins to understand the needs for rules and structure.

**Performance capabilities & limitations**
- Children perceive these experiences as a form of self-evaluation: “I am a good person if I do well – I’m a bad person if I do poorly.” This may encourage them or deflate them
- When a situation becomes threatening and alluding to a break in peer acceptance they quickly lose confidence.
- Acceptance into a peer group often depends upon one’s abilities in physical skills and activities.
- Children can understand and play simple games with simple rules and will tend to question rules and expect thoughtful answers.

**Implications for the Baseball coach**
- Children need positive perceptions of them and need positive reinforcement on a regular basis. This will provide the motivation to continue with the activity.
- Plan and structure technical and tactical activities so that success is virtually guaranteed. This means progressing from simple to more complex activities.
Coaches must be capable of assessing the basic skills and of providing a varied program of practical opportunities for technical and tactical development and improvement.

Children need equal praise for all forms of effort. Participation and fun to be emphasized over winning. Focus is on the process, not on the outcome!

Learning to train/training to train

Physical development:
Characteristics and implications

Basic characteristics
- Significant proportional changes occur in bone, muscle and fat tissue.
- Girls begin their growth spurt between ages 12.5 -14, boys between 12.5 -15. Girls attain a maximum rate of growth at average age 11, boys at average age 14.
- Smaller muscle groups are becoming more developed.
- During this phase the various parts of the body do not grow at the same rate. The growth rate of the legs and arms will reach a peak prior to that of the trunk.
- A significant increase in red blood cells occurs – especially in boys due to the male hormone testosterone.
- The central nervous system is almost fully developed.

Performance capabilities & limitations
- During growth spurts adaptation is influenced by sudden changes of body proportions.
- Early in this phase, girls are faster and stronger than boys are. This situation is reversed later on in the phase.
- Speed, agility and co-ordination are still improving rapidly during this phase.
- A change in the centre of gravity, length of limbs and core strength will determine the content of training.
- The oxygen transportation system is still developing and aerobic endurance is continuing to increase.
- Agility, balance and co-ordination are fully trainable.

Implications for the Baseball coach
- Monitor training carefully and individualize the content of training to ensure adaptation.
- Chronological age might not be the most appropriate way to group players.
- Situations when fear, guilt or anxiety is brought about by sexual development should be avoided.
- With the improvement of fine motor skill movement all basic technical skills to be mastered. Players should learn how to train including physical, technical, tactical and ancillary capacities (e.g. warm up, cool down, diet, nutrition, hydration etc).
- Some of the already learned skills might need to be relearned again due to growth of limbs that might affect technique. The increase in body mass requires more structured aerobic training. Only short duration of anaerobic activities are recommended.
Learning to train/training to train

Mental/cognitive development:
Characteristics and implications

Basic characteristics
- Abstract thinking becomes more firmly established.
- Young players develop a new form of egocentric thought. Much emphasis is placed on self-identity.
- Young players are eager to perfect their skills.

Performance capabilities & limitations
- Decision making through more complex technical training/practice should be introduced.
- This may result in a strong fear of failure.
- Individual specific direction and structure in the learning process is required. Learning may be holistic or in pattern. A variety of methods to measure success are important to maintain motivation.

Implications for the Baseball coach
- Decision-making on tactical solutions and game plans should be based upon the skill level of the player.
- Create the optimum learning environment, match skill and drill levels. Focus on mastery. Introduce simple coping strategies for winning and losing, positive reaction to challenges.
- Provide a strong role model by presenting “winning mind” values and beliefs.
- Positive reinforcement is imperative. The difference between the physical and mental development can vary greatly and care must be taken not to pick the early developers and neglect or deselect the late-developers. The coach’s ability to demonstrate specific skills is important.

Learning to train/training to train

Emotional development:
Characteristics and implications

Basic characteristics
- There is a tremendous influence on behavior from peer groups for young athletes to succeed.
- During this phase players are capable of co-operating and accepting some responsibility.
- Tension generally exists between adults and adolescents.
- It is important at this developmental level that young players are able to display tenderness, admiration and appreciation.
- Physical, mental and emotional maturity does not necessarily develop at the same rate.
- There is a desire to have friends of the opposite sex.
Performance capabilities & limitations

- Values and attitudes are being created and reinforced by the group.
- Some players may be less responsible mainly due to a fear of failure.
- Communication channels should be kept open by adults, as all teenagers need help even though they do not recognize the need or seem grateful for the help.
- Deprivation of these qualities often leads to exaggerated and/or unacceptable behaviour.
- Feelings of confusion or anxiety may exist as a result.
- Social activities are important events for this age group.

Implications for the Baseball coach

- The coach should exercise strong direction and supervision. A role model for young players at this phase is very important.
- Coach must have open lines of communication with players.
- Coach is usually better accepted than other adults and should always attempt to foster two-way communication. Coaches should create environment for opportunities to make decisions, decide on methods, make judgments and make mistakes.
- Early matures often become leaders and excel in performance. Coaches must not create “in and out” groups as this can have negative effects on other player’s development. This especially to 1st and 2nd year within a specific age playing group.

Training to compete

Physical development:
Characteristics and implications

Basic characteristics

- The circulatory and respiratory systems reach maturity.
- An increase in height and weight gradually slow down and stabilization occurs in the muscular system.
- Skeletal maturation continues in males and females.
- By age 17, girls generally have reached adult proportions, whereas boys do not generally reach such proportions until several years later.

Performance capabilities and limitations

- These systems are generally capable of giving maximum output.
- Muscles have grown to their mature size but muscular strength continues to increase reaching its peak in the late twenties.
- Connective tissues are still strengthening.
- Proportionally, girls gain more weight than boys during this phase.

Implications for the coach

- Aerobic and anaerobic systems can be trained for maximum output. Full Baseball-specific energy system training should be implemented.
- Strength training can be maximized to improve overall strength development. Neuromuscular training should be optimized during this phase.
- Progressive overloading in training should be continued.
Aerobic training for girls to be optimized. Coaches should be aware how to deal with weight gain and effect on figure.

Players should learn how to compete including all technical, tactical and ancillary components.

Training to compete

Mental/cognitive development:  
Characteristics and implications

Basic characteristics
- Generally, by age 16, the brain has reached its adult size but continues to mature neurologically for several more years.
- Critical thinking is well developed during this phase.

Performance capabilities and limitations
- Players can cope with multiple strategies and tactics, particularly near the end of the phase.
- The capacity of self analysis and correction is developing

Implications for the coach
- Coaches should ensure the refinement of all technical and tactical skills.
- Decision-making should be developed further through technical and tactical development.
- Coaches to promote autonomy and independence.
- Coaches to create environment where players are encouraged to make decisions, decide on methods and make judgments.
- A structured environment in order to maintain a strong mastery competitive value base.

Training to compete

Emotional development:  
Characteristics and implications

Basic characteristics
- Peer group influence is still a powerful force.
- Players are searching for a stable, balanced self-image.
- Activities and interaction with the opposite sex are important during this phase.

Performance capabilities and limitations
- Independent decision-making and leadership skills are becoming more developed.
- Self-concept is still very much influenced by success and failure. Coping techniques are useful.
Implications for the coach

- Players should be given the opportunity to develop through participation in appropriate leadership or responsible role (i.e. Captains) but strong direction and discipline must be maintained.
- Positive evaluation of performances and positive reinforcement are imperative.

Training to win

Physical development: Characteristics and implications

Basic characteristics

- Physiologically the body reaches maturity during this phase.
- Final skeletal maturation occurs at age 19-20 for females and approximately 3 years later for males.
- Performance capabilities and limitations

  All physiological systems are fully trainable

Implications for the coach

- Coaches should use the most advanced physical training techniques and programs to ensure maximum adaptation and to minimize injuries.
- Coaches should ensure that all muscle groups and body alignments are well balanced and complemented by optimum flexibility ranges.
- State of the art testing and monitoring programs to be used.
- Over training and overstress should be carefully monitored.
- Regular appropriate medical monitoring should be conducted, with additional blood tests for female players to prevent iron deficiency.

Training to win

Mental/cognitive development: Characteristics and implications

Basic characteristics

- Neurologically the brain matures about 19-20 years of age.
- There is a complete understanding and acceptance of the need for rules, regulations and structure.

Performance capabilities and limitations

- Players are capable of self-analyzing and correcting and refining skills. Players can analyze and conceptualize all facets of Baseball.
- Well-developed information processing skills improve the player’s ability to visualize verbal instructions.
- The young player must perceive the rules and structure as being clearly defined and fair.

Implications for the coach

- Coaches should use the most advanced physical training techniques and programs to ensure maximum adaptation and to minimize injuries.
Coaches should insure that all muscle groups and body alignments are well balanced and complemented by optimum flexibility ranges.

State of the art testing and monitoring programs to be used.

Over training and overstress should be carefully monitored.

Regular appropriate medical monitoring should be conducted, with additional blood tests for female players to prevent iron deficiency.

Training to win

Emotional development:
Characteristics and implications

Basic characteristics
- There is a need to be self directed and independent.
- Self-actualization and self-expression are important.
- Major decisions on career, lifestyle and education are important at some point in this phase.
- Interactions with the opposite sex continue to be a strong priority with lasting relationships developing. Young adults should be introduced to safe moral standings in relation to sex and HIV/Aids

Performance capabilities and limitations
- The players are ready to assume responsibility and accept the consequences of their actions.
- Major changes in interests, hobbies and physical activities occur during this phase. Players should be encouraged

Implications for the coach
- Goal setting should be strongly emphasized to give definite direction and purpose to the player’s overall program.
- The players need to be treated as adults – with respect though direction and structure from the coach is still important.
- Professional guidance should be made available considering off-season and educational pursuits.
- Players must have ample opportunities for independent social interaction.

APPENDIX TWO

ANNUAL PROGRAMME & IMPLEMENTATION GUIDELINES (Adapted and modified from SABU’s LTPD model)

THE ANNUAL PROGRAMME & IMPLEMENTATION GUIDELINES

The following schedules and work program set down the amount of development work that should be done with individuals, when that work should take place and what it should consist of. The programmes and guidelines are designed to assist Schools, Community/Recreation Centers, Private Academies, Clubs and Provincial/Regional Associations position themselves for full future implementation of the LTPD principles and help plan development activities over the long-term. The following points should be noted:
• All children should have the opportunity to be part of the Fundamentals stage of LTPD.
• The priority should be on the long-term development of individuals as opposed to short-term team success.
• The new South African Coaching Commission will ensure that LTPD principles are incorporated into all Levels of coaching.
• A degree of flexibility may need to be applied to parts of the Annual Program where conflicts with educational requirements take place.
• The majority of players will not possess the necessary talent, desire or inclination to reach elite levels within the game. For these players, programs should be designed around a “Core” LTPD programme which provides for basic LTPD principles to be applied. For those potential top players, an “Extended” LTPD program will be provided as shown in the Annual Program and Implementation Guidelines.

Active Start – Baseball South Africa has no defined role at this stage. However it fully supports Active Start initiatives presented by provincial/territorial bodies.

ANNUAL PROGRAM – FUNDAMENTALS STAGE OF LTPD

Chronological Age: 6-9 Male, 6-8 Female

<table>
<thead>
<tr>
<th>Developmental Phase</th>
<th>General Athletic Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Phase Aims</td>
<td>To provide the young performer with overall athletic skills in addition to basic Baseball-specific skills with the emphasis on fun and participation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amounts of Activity (Weekly)</th>
<th>• 4 sessions general sports activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 2 hours Baseball to include ABC’s work (see below)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developmental Phase Skills</th>
<th>• Basic Baseball skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Agility</td>
</tr>
<tr>
<td></td>
<td>• Balance</td>
</tr>
<tr>
<td></td>
<td>• Co-ordination</td>
</tr>
<tr>
<td></td>
<td>• Speed</td>
</tr>
<tr>
<td></td>
<td>• Flexibility</td>
</tr>
<tr>
<td></td>
<td>• Desired “Attitude” training</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session Lengths</th>
<th>1 hour maximum</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Existing Program links</th>
<th>• South African program is needed to target this age group Baseball, Tee Ball, etc.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Point of Delivery</th>
<th>• Elementary School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Accredited Academies</td>
</tr>
<tr>
<td></td>
<td>• Local Clubs and Organizations</td>
</tr>
<tr>
<td></td>
<td>• Community Centres</td>
</tr>
</tbody>
</table>

Notes:
The programme should be structured, flexible i.e. no periodized planning and progressive. Coaches should include Agility, Balance, Co-ordination and Speed (ABC’S) training within warm ups and small-sided game activities. Stretches for flexibility should incorporate all the joints of the body (particular hips, shoulders and ankles) and be delivered at the end of the general warm-up, during rest intervals and at the end of sessions.

The total activity time should be approximately 6 hours per week, including two hours of Baseball related activity. Sports such as table tennis, tennis, soccer, softball, cricket, ice hockey and field hockey are considered complimentary to developing Baseball skills.

It is recommended that coaches ensure that, during this phase of LTPD, 10-15 minutes of ABC’S are incorporated into the early part of all Baseball sessions. Children need to be active and moving around. So make sure you minimize the amount of time children are standing around and waiting for their turn. Have smaller teams, set up more stations, and keep them involved.

Young athletes should be introduced to simple rules and ethics of Baseball as well as always being exposed to a positive environment.

**ANNUAL PROGRAMME – LEARN TO TRAIN STAGE OF LTPD**

Chronological/Developmental Age: 9-12 Male, 8-11 Female

Implementers: Elementary/Primary Schools, Accredited Academies, Community Centres, Local clubs and organizations

YEARS 1 and 2 – Males 9 &10 years, Females 8 & 9

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 29 - 31 weeks Baseball training and other sports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 18 – 23 weeks competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 6-8 weeks Pre-Season</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3 hours per week</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>60 - 90 minutes max. per session</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2 hours per week</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
A training/practice week to include:

• 5-6 hours other sports (through school or extra-curricular activity)
• 2-3 hours Baseball specific (for Year 1 include Agility, Balance, Coordination, Speed, run, jumps, throws and Flexibility)
• 1-2 hour Agility, Balance, Co-ordination, Speed, run, jumps, throws & Flexibility (for Year 2)
A typical competition week to include:
- 1 Match & 2 Practices

**ANNUAL PROGRAMME – LEARN TO TRAIN STAGE OF LTPD**

Chronological/Developmental Age: 9-12 Male, 8-11 Female

Implementers: Primary School, Accredited Academies, Local Club and organizations, Community Centres

YEAR 3 and 4 – Males 11 & 12, Females 10 &11

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 - 31 weeks Baseball training and other sports</td>
<td>4 hours per week</td>
<td>2 hours per week</td>
</tr>
<tr>
<td>18 – 23 weeks competition 6-8 weeks Pre-Season</td>
<td>90-120 minutes max. per session</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
A training/practice week to include:
- 5 hours other sports (through school or extra-curricular activity)
- 4 hours Baseball specific
- .5 hours agility
- .5 hours balance
- .5 hours co-ordination
- .5 hours speed & flexibility

A typical competition week to include:
- 1 Match & 2 Practices

**ANNUAL PROGRAMME – TRAIN-TO-TRAIN STAGE OF LTPD**

Developmental Age: 12-16 Male, 11-15 Female

Implementers: Primary and Secondary Schools, Accredited Academies, Local Clubs and Organizations, Provincial/Regional Organizations,

YEAR 5 – Males 13, Females 12

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 - 31 weeks Baseball training</td>
<td>4 hours per week</td>
<td>2 hours per week</td>
</tr>
</tbody>
</table>
and other sports
• 18 – 23 weeks competition
• 6-8 weeks Pre-Season
| 90 - 120 minutes per session |

Notes:
A training/practice week to include:
• 4 hours other sports (through school or extra-curricular activity)
• 4 hours Baseball specific
• .5 hour agility
• .5 hour balance
• .5 hour co-ordination
• .5 hour speed & flexibility

A typical competition week to include:
• 1 match & 2 practice

ANNUAL PROGRAMME – TRAIN-TO-TRAIN STAGE OF LTPD

Developmental Age: 12-16 Male, 11-15 Female

Implementers: High and Secondary Schools, Accredited Academies, Local Clubs and Organizations, Provincial/Regional and National Organizations

YEAR 6 – Males 14, Females 13

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of Competition</th>
</tr>
</thead>
</table>
| • 29 - 31 weeks Baseball training and other sports
• 18 – 23 weeks competition
• 6-8 weeks Pre-Season | 6 hours per week 120 minutes max. per session | 4 hours per week |

Notes:
A training/practice week to include:
• 3 hours other sports (through school or extra-curricular activity)
• 6 hours Baseball specific

Fitness Preparation
• .5 hour speed
• .5-1 hour strength
• 1-2 hour endurance
• .5 hour co-ordination/agility
• .5 flexibility
A typical competition week to include:
- 2 matches & 3 practices

**ANNUAL PROGRAMME – TRAIN-TO-TRAIN STAGE OF LTPD**

Developmental Age: 12-16 Male, 11-15 Female

Implementers: High and Secondary Schools, Accredited Academies, Local Clubs and Organizations, National, Provincial/Regional Organizations

YEAR 7 & 8 – Males 15 and 16, Females 14 and 15

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 29 - 31 weeks Baseball training and other sports&lt;br&gt;- 18 – 23 weeks competition&lt;br&gt;- 6-8 weeks Pre-Season</td>
<td>6 hours per week (Winter)&lt;br&gt;8 hours per week (Summer)&lt;br&gt;120 minutes max. per session</td>
<td>5 hours per week</td>
</tr>
</tbody>
</table>

Notes:
A training/practice week to include:
- 2 hours other sports (through school or extra-curricular activity)
- 6-8 hours Baseball specific

Fitness Preparation
- 1 hour speed
- 1-2 hours strength
- 2 hours flexibility
- 1-2 hours endurance
- .5 hour co-ordination/agility
- Individualized regeneration procedural protocols/activities

A typical competition week to include:
- 2 matches & 3-4 practice

Specialization in baseball

**ANNUAL PROGRAMME – TRAIN TO COMPETE STAGE ONE OF LTPD**

Chronological/ Developmental Age: 16-18 Male, 15-17 Female

Implementers: High and Secondary Schools, Local Clubs and Organizations, Accredited Academies, National, Provincial/Regional Organizations
YEAR 9 – Males 17, Females 16

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 29 - 31 weeks Baseball training and other sports&lt;br&gt;• 18 – 23 weeks competition&lt;br&gt;• 6-8 weeks Pre-Season&lt;br&gt;• 1 weeks rest&lt;br&gt;• 2 weeks active rest</td>
<td>6 hours per week (winter) 8 hours per week (summer) 120 minutes max. per session</td>
<td>6-8 hours per week</td>
</tr>
</tbody>
</table>

Notes:
A training/practice week to include:
• 6-8 hours Baseball specific

Fitness Preparation (Based on individual needs)
• .5 hour speed
• 1-2 hours strength
• 2 hours flexibility
• 1-2 hours endurance
• .5-hour co-ordination/agility
• Individualized regeneration activities

A typical competition week to include:
• 2/3 matches & 4 practice

ANNUAL PROGRAMME – TRAIN TO COMPETE STAGE TWO OF LTPD

Chronological Age: 16-23+ Male, 15-22+ Female

Implementers: High and Secondary Schools, Local Clubs and Organizations, National, Provincial/Regional Organizations, Accredited Academy

YEAR 10+ – Males 18-23, Females 17-22

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Baseball Specific Training</th>
<th>Hours of Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 29 - 31 weeks Baseball training and other sports&lt;br&gt;• 18 – 23 weeks competition</td>
<td>6 hours per week (winter) 10 – 12 hours per week (summer) 120 - 180 minutes max. per session</td>
<td>6 – 8 hours per week</td>
</tr>
</tbody>
</table>
**ANNUAL PROGRAMME – TRAIN TO WIN STAGE OF LTPD**

Chronological Age: 22+ Male, 23+ Female

<table>
<thead>
<tr>
<th>Periodization</th>
<th>Practice Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 - 31 weeks</td>
<td>7 - 10 hours per week (general preparatory phase)</td>
</tr>
<tr>
<td>Baseball training</td>
<td></td>
</tr>
<tr>
<td>18 – 23 weeks</td>
<td>12 - 14 hours per week (pre-competition phase)</td>
</tr>
<tr>
<td>competition</td>
<td></td>
</tr>
<tr>
<td>6-8 weeks Pre-Season</td>
<td></td>
</tr>
<tr>
<td>1 weeks rest</td>
<td></td>
</tr>
<tr>
<td>2 weeks active rest</td>
<td></td>
</tr>
</tbody>
</table>

Notes (See Implementation Guidelines for Train to Win Phase for details)

**IMPLEMENTATION GUIDELINES – FUNDAMENTALS STAGE OF LTPD**

Chronological Age: 6-9 Male, 6-8 Female

**Program Links:** South African Specific Schools Baseball program
**Implementers:** Primary School, Accredited Academies, Local Clubs and organizations, Community Centres, Amount of activity per week: 2 hours Baseball, 4 x General Sport Sessions

**Basic Baseball Skills - 2 hours/week:** to include BATTING – hitting off a balanced stance, basic hitting off a TEE and Front Toss. PITCHING - ball grip & basic pitching action/mechanics. FIELDING – basic fielding, catching a ball & throwing techniques. CATCHING – basic set up, receiving & catching a ball and throwing mechanics.

**Agility, Balance, Co-ordination, Speed & Flexibility** – to be included within the 2 hour Basic Baseball Skills.

**Other Sports & Activities** – E.g. Ice hockey, Table tennis, Field hockey, Tennis, Soccer, Cricket, Dance, Swimming, Gymnastics, Basketball, Skateboarding, Cycling, Rollerblading.

**“Attitude” work** – to be included within the 2 hour Basic Baseball Skills: Positive perceptions of self & activities, fun, equal praise, non-judgemental

**POSSIBLE PROGRAM CONTENT (summer programme)**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASEBALL (60 MINS.):</td>
<td>BASEBALL (60 MINS.):</td>
<td>BASEBALL (60 MINS.):</td>
<td>BASEBALL (60 MINS.):</td>
<td>BASEBALL (60 MINS.):</td>
<td>BASEBALL (60 MINS.):</td>
<td>BASEBALL (60 MINS.):</td>
</tr>
<tr>
<td>Warm up 10 mins.</td>
<td>Warm up 10 mins.</td>
<td>Warm up 10 mins.</td>
<td>Warm up 10 mins.</td>
<td>Warm up 10 mins.</td>
<td>Warm up 10 mins.</td>
<td>Warm up 10 mins.</td>
</tr>
<tr>
<td>ABC’s 15 mins.</td>
<td>ABC’s 15 mins.</td>
<td>ABC’s 15 mins.</td>
<td>ABC’s 15 mins.</td>
<td>ABC’s 15 mins.</td>
<td>ABC’s 15 mins.</td>
<td>ABC’s 15 mins.</td>
</tr>
<tr>
<td>OTHER SPORTS</td>
<td>OTHER SPORTS</td>
<td>OTHER SPORTS</td>
<td>OTHER SPORTS</td>
<td>OTHER SPORTS</td>
<td>OTHER SPORTS</td>
<td>OTHER SPORTS</td>
</tr>
</tbody>
</table>

Monday and Wednesday and competition on Saturday or Tuesday and Friday and competition on Sunday.
IMPLEMENTATION GUIDELINES – LEARNING TO TRAIN STAGE OF LTPD

**Chronological/Biological Age:** 9-12 Male, 8-11 Female

**Year 1 & 2** – Males 9 &10, Females 8 &9

**Program Links:** South African Specific Schools Baseball program

**Implementers:** Primary School, Accredited Academies, Local Clubs and organizations, Community Centres.

**Amount of activity per week:** 2-3 hours Baseball, 5-6 hours other Sport Sessions

**Basic Baseball Skills** – 3 hours/week: to include BATTING – hitting off a balanced stance, basic hitting off a Tee and Front Toss, hitting consistently to all fields. PITCHING – ball grip & basic pitching action/mechanics, pitch location FIELDING – basic fielding, catching a ball & throwing techniques. CATCHING – basic set up, receiving & catching a ball, blocking, footwork & throwing mechanics.

**Agility, Balance, Co-ordination, Speed & Flexibility** – to be included within the 2 hour Basic Baseball Skills for Year 1. Do as separate activities for Year 2.

**Agility** – E.g. Somersaults, Lateral work, Slalom etc

**Balance** – E.g. Cartwheels, Bat work, Handstands etc

**Co-ordination** – E.g. Dribbling, Ball work, Rebounding Ball Catching, Skipping, Reaction work etc

**Speed** – Sprints: Base running and sliding with 2 minutes rest in-between to include reaction speed, linear & lateral speed, footwork (ladders), and multi-directional speed

**Flexibility** – Dynamic Mobility & Static Stretching,

**Other Sports & Activities** – E.g. Ice hockey, Table tennis, Field hockey, Tennis, Soccer, Cricket, Dance, Swimming, Gymnastics, Basketball, Skateboarding, Cycling, Rollerblading.

“**Attitude**” work – to be included within the 2 hour Basic Baseball Skills: Positive perceptions of self & activities, simple rules & ethics, positive reactions to challenges, coping strategies for success & failure, awareness with a focus on mastery, encouraging competitiveness, mental toughness

**POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASEBALL</td>
<td>BASEBALL</td>
<td>(DURING THE SEASON –</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(60-90MINS.)</td>
<td>(60-90MINS.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Monday and Wednesday and competition on Saturday or Tuesday and Friday and competition on Sunday.

IMPLEMENTATION GUIDELINES – LEARN TO TRAIN STAGE OF LTPD

Chronological/Developmental Age: 9-12 Male, 8-11 Female

Year 3 & 4 – Males 11 & 12, Females 10 &11

Associated Program Links: South African Specific schools Baseball program

Implementers: Secondary School, Accredited Academies, Local Clubs and organizations, Community Centres.

Amount of activity per week: 4 hours Baseball, 5 hours other Sport Sessions, 2 hours ABC’S, flexibility & strength

Basic Baseball Skills - 4 hours/week: to include BATTING – hitting off a balanced stance & bunting, hitting consistently to all fields. PITCHING – ball grip & basic pitching action/mechanics, pitch location, off speed pitches, change ups. FIELDING – approach to ground balls and fly balls, glove work, backhand, catching, throwing techniques. CATCHING – basic set up & stance, receiving & catching a ball, blocking, foot work & throwing mechanics. FIELD POSITIONS. TACTICAL WORK.

Agility – complex footwork drills with Baseball-specific patterns

Co-ordination – complex footwork & hand drills with Baseball-specific patterns

Speed – Sprints: base running and sliding with 2 minutes rest in between to include reaction speed, linear & lateral speed, footwork (ladders), and multi-directional speed

Flexibility – Dynamic Mobility & Static Stretching
**Strength** – Core, shoulder, elbow, spine & ankle stability using own body weight & medicine ball/swiss ball

**Other Sports & Activities** – E.g. Ice hockey, Table tennis, Field hockey, Tennis, Soccer, Cricket, Dance, Swimming, Gymnastics, Basketball, Skateboarding, Cycling, Rollerblading.

“**Attitude**” work – to be included within the hours Basic Baseball Skills: Positive perceptions of self & activities, simple rules & ethics, positive reactions to challenges, coping strategies for success & failure, awareness with a focus on mastery, encouraging competitiveness, mental toughness.

**POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OTHER SPORTS</td>
<td></td>
<td>OTHER SPORTS</td>
<td></td>
<td>OTHER SPORTS</td>
<td></td>
</tr>
</tbody>
</table>

Monday and Wednesday and competition on Saturday or Tuesday and Friday and competition on Sunday.

**IMPLEMENTATION GUIDELINES – TRAIN-TO-TRAIN STAGE OF LTPD**
(Keep until Males 15 and Females 14)

**Developmental Age:** 12-16 Male, 11-15 Female

**Year 5** – Males 13, Females 12

**Associated Program Links:** South African Specific schools Baseball program

**Implementers:** High and Secondary Schools, Accredited Academies, Local Clubs and Organizations, Provincial/Regional Organizations
**Amount of activity per week:** 4 hours Baseball, 4 hours other Sport Sessions, 2 hours ABC’S, flexibility, strength & endurance

**Baseball Skills** - to include BATTING – hitting from a balanced stance, hitting off a Tee, front toss, live hitting to all sides. PITCHING – ball grip & pitching mechanics, pitch location, off speed pitches, limited curve balls, change ups. FIELDING – approach to ground balls and fly balls, glove work, backhand, catching fly balls, throwing techniques. CATCHING – basic set up & stance, receiving & catching a ball, blocking, foot work & throwing mechanics. FIELD POSITIONS. TACTICAL WORK (1 Day Baseball)

**Agility** – complex footwork drills with Baseball-specific patterns

**Co-ordination** - complex footwork & handwork drills with Baseball-specific patterns

**Speed** – Sprints: Base running and sliding with 2 minutes rest in between to include reaction speed, linear & lateral speed, footwork (ladders) and multi-directional speed

**Flexibility** – Ballistic & Static Stretching

**Endurance** - Aerobic base (swimming, games, cycling & running)

**Strength** – Core, shoulder, elbow, spine & ankle stability using own body weight & medicine ball/swiss ball

**Other Sports & Activities** – E.g. Ice hockey, Table tennis, Field hockey, Tennis, Soccer, Cricket, Dance, Swimming, Gymnastics, Basketball, Skateboarding, Cycling, Rollerblading.

“**Attitude**” work – positive reactions to challenges, coping strategies for success & failure, awareness with a focus on mastery, encouraging competitiveness, mental toughness

**POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASEBALL (120 MINS.):</td>
<td>BASEBALL (120 MINS.):</td>
<td>BASEBALL (120 MINS.):</td>
<td>BASEBALL (120 MINS.):</td>
<td>BASEBALL (120 MINS.):</td>
<td>BASEBALL (120 MINS.):</td>
<td>BASEBALL (120 MINS.):</td>
</tr>
<tr>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
</tr>
<tr>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
</tr>
</tbody>
</table>

(DURING THE SEASON – MATCHES & GAMES)
Monday and Wednesday and competition on Saturday or Tuesday and Friday and competition on Sunday.

IMPLEMENTATION GUIDELINES – TRAINING TO TRAIN STAGE OF LTPD

Developmental Age: 12-16 Male, 11-15 Female

Year 6 – Males 14, Females 13

Associated Programme Links: South African Specific schools Baseball program

Implementers: High and Secondary Schools, Accredited Academies, Local Clubs and Organizations, Provincial/Regional Organizations

Amount of activity per week - 6 hours Baseball, 3 hours other Sport Sessions, 2-4.5 hours ABC’S, flexibility, strength & endurance

Baseball Skills - to include BATTING – hitting from a balanced stance, hitting off a Tee, front toss, live hitting to all sides. PITCHING – ball grip & pitching mechanics, pitch location, off speed pitches, limited curve balls, change ups. FIELDING – skill work per position. CATCHING – basic set up & stance, receiving & catching a ball, blocking, foot work & throwing mechanics. TACTICAL WORK (1 Day Baseball & 3-4 Day Baseball) & specific game situations

Agility – complex footwork drills with Baseball-specific patterns

Co-ordination – complex footwork & handwork drills with Baseball-specific patterns

Speed – Sprints: Base running and sliding at work: rest ratio 1:4 to include reaction speed, linear & lateral speed, footwork (ladders) and multi-directional speed

Flexibility – Dynamic Mobility & Static Stretching

Endurance - Aerobic base (swimming, games, cycling & running)

Strength – Core stability, shoulder, elbow, spine & ankle stability using own body weight & medicine ball/swiss ball

Other Complementary Sports & Activities – E.g. Tennis, Swimming,

“Attitude” work – positive reactions to challenges, coping strategies for success & failure, awareness with a focus on mastery, encouraging competitiveness, mental toughness

POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BASEBALL (120 MINS.):
Warm up 15 mins.
ABC’s 20 mins.
Baseball-specific skill development 45 mins.
Scrimmage 30 mins.
Cool down – 10 mins.

ABC’S 20 mins.
Baseball-specific skill development 45 mins.
Scrimmage 30 mins.
Cool down – 10 mins.

BASEBALL (120 MINS.):
Warm up 15 mins.
ABC’s 20 mins.
Baseball-specific skill development 45 mins.
Scrimmage 30 mins.
Cool down – 10 mins.

OTHER SPORTS

OTHER SPORTS

(DURING THE SEASON – MATCHES & GAMES)

Friday session before Saturday game is 60 minutes or Saturday session before Sunday game is 60 minutes

IMPLEMENTATION GUIDELINES – TRAINING TO TRAIN STAGE OF LTPD

Developmental Age: 12-16 Male, 11-15 Female

Year 7 & 8 – Males 15 & 16, Females 14 & 15

Associated Program Links: Provincial/Regional U16 Squads

Implementers: High and Secondary Schools, Accredited Academies, Local Clubs and Organizations, Provincial/Regional Organizations

Amount of activity per week: 6-8 hours Baseball, other Sport Sessions, 5-7 hours ABC’S, flexibility, strength & endurance

Baseball Skills - to include BATTING – hitting from a balanced stance, hitting off a Tee, front toss, live hitting to all sides & bunting. PITCHING – ball grip & pitching mechanics, pitch location, off speed pitches, limited curve balls, change ups. FIELDING – skill work per position. CATCHING – basic set up & stance, receiving & catching a ball, blocking, foot work & throwing mechanics. TACTICAL WORK (1 Day Baseball) & specific game situations

Agility – complex footwork drills with Baseball-specific patterns

Co-ordination – complex footwork & handwork drills with Baseball-specific patterns

Speed – Sprints: Base running and sliding with work: rest ratio of 1:4 to include reaction speed, linear & lateral speed, footwork (ladders) and multi-directional speed
**Flexibility** – Dynamic Mobility & Static Stretching

**Endurance** - Aerobic base (swimming, games, cycling & running) & Baseball-specific anaerobic work (interval training, relays etc).

**Strength** – Core, shoulder, elbow, spine & ankle stability. Introduction to free weights and Olympic lifting.

**Other Complementary Sports & Activities** – E.g. Tennis, Swimming

“**Attitude**” work – positive reactions to challenges, coping strategies for success & failure, awareness with a focus on mastery, encouraging competitiveness, mental toughness

**POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
</table>

**IMPLEMENTATION GUIDELINES – TRAIN TO COMPETE STAGE OF LTPD**

**Chronological/Developmental Age:** 16-18 Male, 15-17 Female

**Year 9** – Males 17, Females 16

**Associated Program Links:** National U18 Squad, Provincial/Regional U18 Squad
**Implementers:** High and Secondary Schools, Accredited Academies, Local Clubs and Organizations, Provincial/Regional Organizations

**Amount of activity per week:** 7-8 hours Baseball, 2 hours other Sport Sessions, 6-8 hours ABC’S, flexibility & strength

**Baseball Skills** - to include BATTING – hitting from a balanced stance, hitting off a Tee, front toss, live hitting to all sides & bunting. PITCHING – ball grip & pitching mechanics; pitch location, off speed pitches, limited curve balls, change ups, velocity. FIELDING – specific fielding positions CATCHING – catching mechanics, blocking, throwing. TACTICAL WORK (1Day/2 day Baseball, specific game situations)

**Agility** – complex footwork drills with Baseball-specific patterns

**Co-ordination** – complex footwork & handwork drills with Baseball-specific patterns

**Speed** – 5/6 sec sprints (base distance) with work: rest ratio of 1:4 to include reaction speed, linear & lateral speed, footwork (ladders) and multi-directional speed

**Flexibility** – Dynamic Mobility & Static Stretching

**Endurance** - Aerobic base (swimming, games, cycling & running) & Baseball-specific anaerobic work (interval training, relays etc).

**Strength** – Free weights and Olympic lifting

**Other Complementary Sports & Activities** – E.g. Swimming, Tennis

**Ancillary Capacities** – media, nutrition and hydration, tapering and peaking, travel skills etc.

**“Attitude” work** – autonomy, independence, lifestyle skills, decision-making, risk taking, mental toughness, competitiveness & other mindsets identified in “Winning Mind”

**POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS**

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm up 15 mins.</td>
<td>ABC’s 20 mins.</td>
<td>Warm up 15 mins.</td>
<td>ABC’s 20 mins.</td>
<td>Warm up 15 mins.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC’s 20 mins.</td>
<td>Baseball-specific skill development 45 mins.</td>
<td>Scrimmage/tactical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Friday session before Saturday game is 60 minutes or Saturday session before Sunday game is 60 minutes

**IMPLEMENTATION GUIDELINES - TRAIN TO COMPETE STAGE OF LTPD**

**Chronological Age:** 16-23+ Male, 15 – 22+ Female

**Year 10+-** Males 18 &19, Females 17 &18

**Associated Program Links:** National U18 Squad, Provincial/Regional U18 squads

**Implementers:** South African Baseball, Provincial/Regional Organizations, Local Clubs and Organization, Accredited Academies

**Amount of activity per week:** 6-12 hours Baseball (season dependent), 5-9 hours ABC’S, flexibility, endurance & strength

**Baseball Skills** - to include BATTING – hitting from a balanced stance, hitting off a Tee, front toss, live hitting to all sides & bunting. PITCHING – ball grip & pitching mechanics; pitch location, off speed pitches, limited curve balls, change ups, velocity. FIELDING – specialist fielding positions. CATCHING – catching mechanics, receiving & blocking, throwing. TACTICAL WORK (1 Day/2 Day and Baseball) & specific game situations

**Agility** - complex footwork drills with Baseball-specific patterns

**Co-ordination** – complex footwork & handwork drills with Baseball-specific patterns

**Speed** – 5/6 sec sprints (base distance) with work: rest ratio of 1:4 to include reaction speed, linear & lateral speed, footwork (ladders) and multi-directional speed
Flexibility – Dynamic Mobility & Static Stretching

Endurance - Aerobic base (swimming, games, cycling & running) & Baseball-specific anaerobic work (interval training, relays etc).

Strength – Free weights and Olympic lifting

Ancillary Capacities – media, nutrition and hyProfation, tapering and peaking, travel skills etc

“Attitude” work – autonomy, independence, decision-making, lifestyle skills, risk taking, mental toughness, competitiveness & other mindsets identified in “Winning Mind”

POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS – Summer Season

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td>Warm up 15 mins.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td>ABC’s 20 mins.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fitness Preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Friday session before Saturday game, the session time is 60 minutes

IMPLEMENTATION GUIDELINES – TRAIN TO WIN STAGE OF LTPD
Chronological Age: 23+/- Male, 22+/- Female

Associated Program Links: National Senior Teams, Provincial/Regional Organizations

Implementers: South African Baseball Accredited Academies, Provincial/Regional Organizations

Amount of activity per week: 16 hours Baseball, 1 hour other Sport Sessions, 7 hours flexibility, strength, speed & endurance

Baseball Skills - to include BATTING – hitting from a balanced stance, hitting off a Tee, front toss, live hitting to all sides & bunting. PITCHING – ball grip & pitching mechanics, pitch location, off speed pitches, curve balls, change ups, velocity. FIELDING – specialist fielding positions. CATCHING – catching mechanics & footwork and throwing. TACTICAL WORK (1 Day/2 day Baseball) & specific game situations

Agility – complex footwork drills with Baseball-specific patterns

Co-ordination – complex footwork & handwork drills with Baseball-specific patterns

Speed – 5/6 sec sprints (base distance) with work: rest ratio of 1:4 to include reaction speed, linear & lateral speed, footwork (ladders) and multi-directional speed

Flexibility – Dynamic Mobility & Static Stretching

Endurance - Aerobic base (swimming, games, cycling & running) & Baseball-specific anaerobic work (interval training, relays etc).

Strength –Free Weights and Olympic Lifting

Other Complementary Sports & Activities – E.g. Squash, Swimming

Ancillary Capacities – media, nutrition and hydration, tapering and peaking, travel skills etc

“Attitude” work – autonomy, independence, lifestyle skills, decision-making, risk taking, mental toughness, competitiveness & other mindsets identified in “Winning Mind”

POSSIBLE PROGRAMME CONTENT THROUGH TRAINING/PRACTICE WEEKS (Pre Competitive Phase)

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASEBALL</td>
<td>BASEBALL</td>
<td>BASEBALL</td>
<td>BASEBALL</td>
<td>BASEBALL</td>
<td>BASEBALL</td>
<td>BASEBALL</td>
</tr>
<tr>
<td>(150 MINS.)</td>
<td>(120 MINS.)</td>
<td>(150 MINS.)</td>
<td>(150 MINS.)</td>
<td>(150 MINS.)</td>
<td>(90 MINS.)</td>
<td>(90 MINS.)</td>
</tr>
<tr>
<td>Warm up 30</td>
<td>Warm up 30</td>
<td>Warm up 30</td>
<td>Warm up 30</td>
<td>Warm up 30</td>
<td>Warm up 30</td>
<td>Warm up 30</td>
</tr>
<tr>
<td>MONDAY</td>
<td>TUESDAY</td>
<td>WEDNESDAY</td>
<td>THURSDAY</td>
<td>FRIDAY</td>
<td>SATURDAY</td>
<td>SUNDAY</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>FITNESS (90 MINS.): Warm up 15 mins.</td>
<td>BASEBALL (150 MINS.): Warm up 30 mins.</td>
<td>FITNESS (120 MINS.): Warm up 15 mins.</td>
<td>BASEBALL (90 mins.)</td>
<td>BASEBALL (150 MINS.): Warm up 30 mins.</td>
<td>FITNESS (90 MINS.): Warm up 15 mins.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>speed and agility 15 mins.</td>
<td>speed and agility 15 mins.</td>
<td></td>
<td>speed and agility 15 mins.</td>
<td>speed and agility 15 mins.</td>
<td></td>
</tr>
<tr>
<td>5 hours recovery</td>
<td></td>
<td></td>
<td>5 hours recovery</td>
<td></td>
<td>5 hours recovery</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASEBALL (90 mins.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 hours recovery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

POSSIBLE PROGRAM CONTENT THROUGH TRAINING/PRACTICE WEEKS (General Preparatory Phase – Fitness emphasis)
APPENDIX THREE

COMPETITION GUIDELINES

Providing definitive guidelines on levels of competition for Baseball is difficult. Every player's situation and circumstances differ. However, it is true to say that over-competing for the most talented young players is a problem. Overplaying when combined with insufficient fitness levels, poor footwear, physiological imbalances and poor technique will inevitably lead to a higher risk of injury. It can also lead to early burnout and exit from the sport. If a sports system is to be truly “player centered” then this weakness in our system needs to be addressed.

Future competition reviews will provide guidelines on appropriate play: practice: rest ratios. The guidelines are clearly of primary importance to the most talented players who are in greatest demand but will also benefit the less able player. This sensitive issue will require agreement, co-operation and consensus on calendar planning from different coaches, parents, players and others involved in a talented player’s development. It would seem appropriate to make this decision the responsibility of the national association in consultation with provincial/territorial organizations. An unbalanced competition calendar and unbalanced play to practice ratio will interfere with practice and training opportunities, which in turn will affect player skill and ability levels in later years.

APPENDIX FOUR
Parent’s Code of Conduct

If children are to grow and develop in their sport or physical activity, an environment of positive communication and respect must exist. Parents should observe the following Code of Conduct with their child athletes. The following code is taken from a resource manual developed for community coaches by the Canadian Centre for Ethics in Sport (CCES).

• I will remember that my child plays sport for his or her enjoyment, not for mine.

• I will encourage my child to play by the rules and to resolve conflicts without resorting to hostility or violence.

• I will teach my child that doing one’s best is as important as winning, so that my child will never feel defeated by the outcome of a game/event.

• I will make my child feel like a winner every time by offering praise for competing fairly and trying hard.

• I will never ridicule or yell at my child for making a mistake or losing a competition.

• I will remember that children learn best by example. I will applaud good players’ performances by both my child’s team and their opponents.

• I will not force my child to participate in sports.

• I will never question the official’s judgment or honesty in public.

• I will support all efforts to remove verbal and physical abuse from children’s sporting activities.

• I will respect and show appreciation for the trained volunteer coaches who give their time to provide sport activities for my child, understanding that I have a responsibility to be a part of my child’s development.

I agree to Play Fair. ________________________________________
(Signature of parent)

South African Sport Confederation and Olympic Committee gratefully acknowledges Women in Coaches Associations of National Federations and the Recreation Departments of Provincial and Local authorities.

APPENDIX FIVE

Athlete’s Code of Conduct
If children are to grow and develop in their sport or physical activity, they need to participate in building an environment of positive communication and respect. Parents and coaches can discuss the following Code of Conduct with their child athletes.

The following code is taken from a resource manual developed for community coaches by the Canadian Centre for Ethics in Sport (CCES).

- I will play by the rules and in the spirit of the game.
- I will control my temper – fighting and “bad mouthing” can spoil the activity for everybody.
- I will respect my opponents.
- I will do my best to be a true team player.
- I will remember that winning isn't everything – that having fun, improving skills, making friends and doing my best are as important.
- I will acknowledge all good plays/performances – those of my team and of my opponents.
- I will participate because I want to, not just because my parents or coaches want me to.
- I will remember that coaches and officials are there to help me. I will accept their decisions and show them respect.

I agree to Play Fair. ________________________________
(Signature of athlete)

Canadian Sport Centres gratefully acknowledges the Promotion plus Women in Coaching Committee in conjunction with the Coaches Association of BC and the Recreation and Sport Branch for use of this document.

**APPENDIX SIX**

**Learning More about SPORT4LIFE and LTPD**

If you would like to learn more or direct others to information on SPORT4LIFE and LTPD, please visit, the SASCOC LTPD web site. At this site you can:

- Review LTPD guidelines and programmes online.
Download copies of LTPD resources.
Find links to more LTPD and related information.
Find a speaker at www.sascoc.co.za who can present on Baseball4Life to your local or national organization.

Other Resources

In addition to SPORT4LIFE and LTPD, there are many other organizations and web sites that provide resources for parents who want to learn more about sports and physical activity for their child. The following list describes national resources and organizations – parents should note that there are also many provincial and community resources that complement these organizations:

Aboriginal Sport Circle (www.aboriginalsportcircle.ca)
• Canada’s national voice for Aboriginal sport, bringing together the interests of First Nations, Inuit and Métis peoples.

Active Living Alliance for Canadians with a Disability (www.ala.ca)
• Promotes, supports and enables Canadians with disabilities to lead active, healthy lives.

AthletesCAN (www.athletescan.com)
• Association of Canada’s national team athletes, with news and events.

Canada Games Council (www.canadagames.ca)
• Information on the biennial Canada summer and winter games.

Canadian Association for Health, Physical Education, Recreation and Dance (CAHPERD) (www.cahperd.ca)
• Advocacy group for quality, school-based physical and health education.

Canadian Centre for Ethics in Sport (www.cces.ca)
• AdProfessing ethical issues in sport such as Profugs and doping.

Canadian Fitness and Lifestyle Research Institute (www.cfri.ca)
• Conducts research and makes recommendations to increase physical activity in Canada.

Canadian Paralympic Committee (www.paralympic.ca)
• Organization promoting the Paralympic sports movement in Canada.

Canadian Parks and Recreation Association (www.cpra.ca)
• Organization promoting parks and recreation services for community health.

Canadian School Sport Federation (www.schoolsport.ca)
• Parent body promoting results, upcoming events, information on new projects and initiatives.
Canadian Sport Centres (www.pch.gc.ca/progs/sc/prog/cns-nsc)
• Network of training centres for high performance athletes, including those with a disability.

Coaches Association of Canada (www.coach.ca)
• Information on coaching and certification programs available to your child's coach.

Coaches of Canada (www.coachesofcanada.com)
• A members’ organization advancing the profession of coaching in Canada.

Coalition for Active Living (www.activeliving.ca)
• Action group that focuses on health promotion and disease prevention through physical activity.

Joint Consortium for School Health (www.jcsh-cces.ca)
• Information on the work being done by Canada’s governments on school-based and school-linked health promotion.

Special Olympics Canada (www.specialolympics.ca)
• Dedicated to enriching the lives of Canadians with an intellectual disability through sport.

True Sport Foundation (www.truesportpur.ca)
• Advocacy organization promoting positive values in Canadian community sport.

The Role of SABU and its Regional Affiliates (consultation with executive & provincial bodies)

In its role as National Governing Body for Baseball, SABU would take on the implementation of many of the structural and framework changes required to make sure the LTPD programme is effective throughout South Africa. Policy decided at a national level would then be delivered locally and in line with local needs.

In regard to LTPD, specific roles and responsibilities of SABU would include the following:

• To ensure that any relevant current and future programs and initiatives affecting the performer’s development are consistent with the aims of the Long-Term Athlete Development sports system for Baseball.
• Through the Coach Education Department and the Development Department, the design and delivery of any changes and amendments needed to the current system of SETA courses, Teacher Training, the Coach Education system and Coach Development.
• Existing Ethics, Equity, Child Welfare, Facilities, Disabilities, Volunteer, ACE and other Strategies are aligned and integrated into the new system.
• To ensure that competition rules and guidelines are designed to be consistent with LTPD principles.
• To ensure that appropriate funding levels support the LTPD sports system and are targeted towards the young performer’s Growth and Development key stages at School, Club, District, and Regional level.
• To put in place effective Detection, Identification, Selection and Development criteria for Talent Identification for use by Schools, Clubs, Districts, Regions and National Squads using the Minimum Quality Standards. This would include a system of objective measurement to monitor competencies achieved.
• To ensure that new initiatives and programs introduced by outside bodies and agencies are appropriately introduced into and are consistent with the LTPD sports system.
• To be responsible for setting up and overseeing an effective monitoring system to evaluate the LTPD process.

**Regions would be responsible for the local delivery of the LTPD sports system.** The roles and responsibilities would include the following:

• A dedicated Performance Officer in each Region, to work alongside the Regional Youth Head Coach, who is responsible for the long-term development of the key 6-15 years of age group of performers. The officer would set policy, plan programmes and liaise with other key personnel (including Academy Director, Clubs, Schools, Parents, Regional ITC Coaches, Regional Performance & Development Departments).
• Responsibility for implementing a nationally consistent Fundamentals program for the 6-9 years of age group.
• Responsibility for delivering an effective district and county program with appropriate levels of practice, training and competition as set down by the SABU.
• Responsibility for mentoring, planning and developing the program for the most talented performers whose chosen sport is Baseball.
• To ensure that adequate funding is targeted within Development Plans to develop the key 6-15 years of age performers. The Minimum Quality Standards will provide guidance as to which areas of development should be prioritized.
• To ensure that a robust system of detecting new talent from Primary School visits is in place and that those detected are introduced to appropriate local Accredited Clubs for focused ongoing development using Club/School cluster groups.

**APPENDIX SEVEN**

**GLOSSARY OF TERMS**

Adaptation
A response to a stimulus or a series of stimuli that induces functional and/or morphological changes in the organism. Naturally, the level or degree of adaptation is dependent upon the genetic endowment of an individual. However, the general trends or patterns of adaptation are identified by physiological research, and guidelines are clearly delineated of the various adaptation processes, such as adaptation to muscular endurance or maximum strength.

**Age:**

**Chronological Age:** the number of years and days elapsed since birth.

**Developmental Age** refers to the degree of physical, mental, cognitive, and emotional maturity.

Physical developmental age can be determined by skeletal maturity or bone age after which mental, cognitive, and emotional maturity is incorporated.

**Training Age** refers to the number of years in training, sampling different sports.

**Sport-specific Training Age** refers to the number of years since an athlete decided to specialize in one particular sport.

**Ancillary capacities:**
The knowledge and experience base of an athlete, including warm-up and cool-down procedures, stretching, nutrition, hydration, rest, recovery, restoration, regeneration, mental preparation, and taper and peak. The more knowledgeable athletes are about these training and performance factors, the more their training and performance levels will be enhanced.

**Childhood**

A time period from the end of infancy (the first birthday) to the onset of puberty that is characterized by relatively steady progress in growth and maturation and rapid progress in neuromuscular or motor development. This time period is often divided into early childhood (which includes preschool children aged one to five years), and late childhood (which includes children aged six through to the onset of puberty).

**Competition**
The period of time when all components of a participant’s training are successfully integrated in to achieve excellence.

**Development**
The passage toward, or percentage of maturity achieved, of various traits including social, emotional, intellectual, physical and motor qualities.

**Growth and Maturation**
The terms “growth” and “maturation” are often used together and sometimes synonymously. However, each refers to specific biological activities. Growth refers to “observable, step-by-step, measurable changes in body size such as height, weight, and percentage of body fat.” Maturation refers to “qualitative system changes, both
structural and functional in nature, in the organism's progress toward maturity; for example, the change of cartilage to bone in the skeleton.”

**Participant:**
One can participate in recreation and/or physical activities and in sport as a recreational or competitive participant.

**Peak Height Velocity (PHV)**
The maximum rate of growth in stature during growth spurt. The age of maximum velocity of growth is called the age at PHV. Also referred to as the adolescent Growth Spurt.

**Periodization**
Is a system of structuring of short and long-term training, competition and recovery periods to provide optimum performances at a given date?
- Single peak refers to one preparatory and one competition period within the year
- Double peak refers to two distinct preparatory and two distinct competition periods within the year
- Multiple peak refers to competing all year round while maintaining physical and technical skills

**Physical Literacy**
Is the mastery of fundamental movement skills and fundamental sport skills? “A physically literate person moves with poise, economy and confidence in a wide variety of physically challenging situations, is perceptive in reading all aspects of the physical environment, anticipates movement needs or possibilities and responds appropriately with intelligence and imagination” (Whitehead, 2001)

**Puberty**
This phase of growth begins with onset of hormonal changes in the reproductive system and ends with sexual maturity.

**Readiness**
Refers to the level of growth, maturity, and development that enables a child to perform tasks and meet demands through training and competition. Readiness and optimal periods of trainability during growth and development of young athletes are also referred to as the correct time for the programming of certain stimuli to achieve optimum adaptation with regard to motor skills, muscular and/or aerobic power.

**Specialization**
Refers to athletes who are limiting their athletic participation to one sport that is practiced, trained for, and competed in throughout the year

**Trainability**
Refers to the genetic endowment of athletes as they respond individually to specific stimuli and adapt to it accordingly. Malina and Bouchard (1991) defined trainability
as “the responsiveness of developing individuals at different stages of growth and maturation to the training stimulus.”