

# Long-Term Athlete Development:

BY SHEILA ROBERTSON AND RICHARD WAY



Reaction to the performances of Canada's 2004 Olympic team ranged from exhilaration to depression — exhilaration over the 12 medals, and depression because Canada slipped from 11th to 19th in country rankings, confirming a drastic weakening of our sport system since 1996. Several weeks later, our Paralympic team won 72 medals and finished third in official medal standings, an outstanding result by any measure. However, Athens depleted the financial reserves of the Canadian Paralympic Committee, rendering the organization vulnerable.

Disappointment and expense aside, the deliberations at the recent CPCA Coaches Forum and CAC Sport Leadership 2004 clearly showed that the Canadian sport community, and especially our coaches, views the pursuit of Olympic and Paralympic medals as desirable and beneficial, not only for those who win, but for the country as a whole.

Sport technical experts argue that Canada's overall weak international performance is traceable to a development system that was eroded by the budget cuts of the 1990s and the resultant depletion of key human and financial resources. As funding is gradually restored, two key questions remain: What is the most effective way to reach the athletes of tomorrow? How do we create an environment where young people thrive, enjoy the sporting experience, feed into our Olympic and Paralympic streams, and remain physically active for life?

We suggest that a key piece of the puzzle is the long-term athlete development (LTAD) model that has been developed and refined in British Columbia.

LTAD is the brainchild of Dr. **Istvan Balyi**, an expert on planning and periodization and on short- and long-term training and performance programs. Nearly four years ago in *Coaches Report*, Balyi assessed key issues facing the sport systems in British Columbia and Canada and offered LTAD as a viable solution. At home, adoption was slow in coming, but in the intervening years Balyi has refined and expanded the model and has been working closely with sport authorities in England and Ireland to implement LTAD throughout their systems. He also enjoys a productive relationship with Australian and New Zealand sport, where many of

his concepts have been adopted. Now LTAD's potential to revolutionize development systems is catching on in Canada. Several national sport federations (NSFs) are well along in implementing LTAD system wide, and Sport Canada has signalled its support through the allocation of \$1 million for "a seamless athlete development system that integrates national and provincial sport organizations."

The Sport Canada support is critical to the future of high performance sport in Canada. Writing in *Coaches Report* ("Medals Earned, Lessons Learned: Canada at the Athens Olympics", Vol. 11, No. 2), CAC president **John Bales** and Canadian Sport Centre Calgary president **Dale Henwood** concluded, "Canada's high performance sport system is simply not keeping pace with steadily improving competitors from a growing number of countries. What matters now is what we do about it. We face a simple choice: maintain the status quo and watch our performances continue to slide, or make major changes and create the conditions for high performance excellence."

Given that assessment, it is timely to take a fresh look at LTAD and assess its potential to advance the changes that Bales and Henwood call for.

## **WHAT IS LTAD?**

LTAD is a training, competition, and recovery program based on biological age (the maturation level of an individual) rather than chronological age. It is athlete centred, coach driven, and administration, sport science, and sponsor supported. Athletes who progress through the LTAD model experience training and competition in programs that consider their biological and training ages in creating periodized plans specific to their developmental needs. "In Canada we talk about being athlete centred, but we are not because we ignore the developing athlete," says Balyi, who has worked with 16 national teams and national coaches since 1985. "We are 'centring' on the high performance athletes, and while I agree that their conditions need to improve, throwing money at them alone is not the solution to our high performance problems."

# A Made-in-Canada Model

## THE PHASES OF THE LTAD MODEL, AS APPLIED TO TENNIS<sup>a</sup>

Phase Feature	FUNDamental	Learning to Train	Training to Train	Training to Compete	Training to Win
<b>Chronological ages</b>	<ul style="list-style-type: none"> <li>■ Males: 6–9</li> <li>■ Females: 6–8</li> </ul>	<ul style="list-style-type: none"> <li>■ Males: 9–12</li> <li>■ Females: 8–11</li> </ul>	<ul style="list-style-type: none"> <li>■ Males: 12–16</li> <li>■ Females: 11–15</li> </ul>	<ul style="list-style-type: none"> <li>■ Males: 16–18</li> <li>■ Females: 15–17</li> </ul>	<ul style="list-style-type: none"> <li>■ Males: 18+</li> <li>■ Females: 17+</li> </ul>
<b>Overall goal</b>	<ul style="list-style-type: none"> <li>■ Fun and participation</li> </ul>	<ul style="list-style-type: none"> <li>■ Overall sport skills</li> </ul>	<ul style="list-style-type: none"> <li>■ Sport-specific skills</li> </ul>	<ul style="list-style-type: none"> <li>■ Event- and position-specific physical conditioning</li> </ul>	<ul style="list-style-type: none"> <li>■ Maintenance or improvement of physical capacities</li> </ul>
<b>Specific goals</b>	<ul style="list-style-type: none"> <li>■ General, overall development</li> <li>■ ABCs of athletics – running, jumping, throwing</li> <li>■ ABCs of athleticism – agility, balance, coordination, speed</li> <li>■ Medicine ball, Swiss ball, own body strength exercises</li> <li>■ Introduction to simple rules of ethics of sport</li> </ul>	<ul style="list-style-type: none"> <li>■ Major skill learning phase, all basic sport skills should be learned before entering next phase</li> <li>■ Mental-cognitive and emotional development</li> <li>■ Introduction to mental preparation</li> <li>■ Medicine ball, Swiss ball, own body strength exercise</li> <li>■ Introduction to ancillary capacities</li> </ul>	<ul style="list-style-type: none"> <li>■ Major fitness development phase (aerobic and strength PHV is the reference point)</li> <li>■ Mental-cognitive and emotional development</li> <li>■ Development of further mental preparation</li> <li>■ Introduction of free weights</li> <li>■ Development of further ancillary capacities</li> <li>■ Frequent musculoskeletal evaluations during Peak Height Velocity</li> </ul>	<ul style="list-style-type: none"> <li>■ Event- and position-specific technical tactical preparation</li> <li>■ Sport-, event-, and position-specific technical and playing skills under competitive conditions</li> <li>■ Advanced mental preparation</li> <li>■ Optimization of ancillary capacities</li> </ul>	<ul style="list-style-type: none"> <li>■ Further development of technical, tactical, or playing skills</li> <li>■ Modelling all possible aspects of training and performance</li> <li>■ Frequent prophylactic breaks</li> <li>■ Maximization of ancillary capacities</li> </ul>
<b>Level</b>	<ul style="list-style-type: none"> <li>■ Screening</li> </ul>	<ul style="list-style-type: none"> <li>■ Talent identification</li> </ul>	<ul style="list-style-type: none"> <li>■ Selection</li> </ul>	<ul style="list-style-type: none"> <li>■ Specialization</li> </ul>	<ul style="list-style-type: none"> <li>■ High performance</li> </ul>
<b>Periodization</b>	<ul style="list-style-type: none"> <li>■ No periodization, but well-structured programs</li> <li>■ Physical activity 5–6 times per week</li> </ul>	<ul style="list-style-type: none"> <li>■ Single periodization</li> <li>■ Sport-specific training 3 times per week, participation in other sports 3 times per week</li> </ul>	<ul style="list-style-type: none"> <li>■ Single or double periodization</li> <li>■ Sport-specific training 6–9 times per week</li> </ul>	<ul style="list-style-type: none"> <li>■ Double or triple periodization</li> <li>■ Sport-specific technical tactical and fitness training 9–12 times per week</li> </ul>	<ul style="list-style-type: none"> <li>■ Double, triple, or multiple periodization</li> <li>■ Sport-specific technical, tactical and fitness training 9–15 times per week</li> </ul>
<b>Competition ratios<sup>b</sup></b>	<ul style="list-style-type: none"> <li>■ 50:50</li> </ul>	<ul style="list-style-type: none"> <li>■ 70:30</li> </ul>	<ul style="list-style-type: none"> <li>■ 60:40</li> </ul>	<ul style="list-style-type: none"> <li>■ 50:50</li> </ul>	<ul style="list-style-type: none"> <li>■ 25:75</li> </ul>

a. This is a generic table developed for the sport of tennis. The ages differ from sport to sport.

b. Competition ratios include competition and competition-specific training.

As the table above illustrates, LTAD covers every aspect of human physical development and is based on the premise that youngsters must be adequately prepared for a life in sport. LTAD helps to cultivate a culture of lifelong participation by highlighting sport's value in improving health and well-being and identifying an optimal path for athletes from playground to podium. LTAD assists in creating an environment that enables participants to achieve their optimum potential, ensuring that everyone learns the FUNDamentals of movement and is provided with a development continuum.

Let's begin with Balyi's assessment of the existing sport system. "Canada, like so many other countries, has been patching the gaps in its existing sport system instead of designing a country-specific system. In our case, we copied the Soviet Union during the 1970s and 1980s; in the 1990s, we looked to East Germany, and then to Australia; and now, with China coming on so fast, no doubt we will look there," says Balyi, who argues for a seamless, integrated LTAD model based on Canada's own socio-political-economic

conditions, integrating and aligning local, regional, provincial, and national structures.

Canada's sport system involves numerous stakeholders in athlete development, many more than most nations with which we are competitive. **Richard Way**, in developing "A Strategic Action Plan for Coaches and Coaching in BC", found that in that province alone there are 24 stakeholders affecting coaches. Clearly there is a profound need for an articulated development pathway, which can then become sport specific. Once that pathway is spelled out, stakeholders at all levels will be able to identify how they can best support the development of the athletes for whom they are responsible.

While implementation of LTAD would narrow and possibly eliminate existing gaps, we must frankly acknowledge the hurdles that must be overcome if we are to achieve our goal as a leading sport nation.



According to Balyi, the challenges include

- adult competition schedules and adult training programs superimposed arbitrarily on young athletes
- male-focused programs superimposed on female athletes
- chronological age rather than maturation level dominating training and competition designs for the 11- to 16-year-old age group
- a lack of career coaches
- a failure by coaches to utilize the critical or sensitive periods of accelerated adaptation to training at the Learning to Train or Training to Train stages because they do not understand the windows of trainability when speed, endurance, skill, strength, and flexibility can be optimally developed
- the most knowledgeable coaches working at the high performance level rather than at the FUNDamental, Learning to Train, and Training to Train stages
- coach education marginally covering the basic issues of growth and development maturation, which should be taught to coaches working with the 6- to 10-year-old and 10- to 16-year-old age groups, when it is most relevant
- administrators' lack of understanding about the essential elements of technical programs
- a lack of integration of sport science, sport medicine, and sport-specific technical-tactical activities below the level of the Canadian Sport Centres (CSCs) and their non-existence at the developmental level
- a society that does not celebrate excellence
- a lack of cohesion in national, provincial, and club plans for athlete development
- a lack of correct interventions at the appropriate time in an athlete's development
- little connection between school and community clubs in sport delivery
- inadequate use of windows of training opportunity
- an inability to track athletes as they progress through the system
- funding constraints
- the lack of a system-wide talent identification program

While acknowledging that the challenges are significant, Balyi insists that change is doable and debunks some of the common myths that hold us back. Most common is the never-ending complaint that Canada's size presents formidable, even insurmountable obstacles. "Geography was never an excuse in the former Soviet Union, nor is it in China or Australia," he says. "My point is that there are no excuses. We always use geography *and* our long winters *and* a lack of funding *and* inadequate facilities. I agree that it's not easy, but if we want to develop a sport system, we must get rid of excuses."

He adds that when young athletes over-compete and under-train or over-train without acquiring a solid base of technical and fitness skills, they fail to achieve their genetic potential because the damage done cannot be fully corrected. Training for developing athletes is geared to outcome and not to process. And even athletes who are good enough to reach the CSCs cannot recover from the inadequacies of their earlier training. "Poorly trained athletes are knocking on the CSCs' doors. Although we can make them good, or even very good, the deficit in their early training is such that the CSCs simply cannot reverse what has already been done," says Balyi.

"At the high performance level, the structures in Canada — the CSCs, the scientific knowledge, and the coaching — are world class. The problem we are struggling with at Olympic Games and world championships is the lack of an aligned, integrated system for 6- to 10-year-olds and 10- to 16-year-olds."

Balyi lists the benefits of establishing LTAD as

- identification of athletes' skill levels to be achieved at each stage of development
- identification of the stakeholder programming required at each stage of development
- guidance in maximizing performance by taking into account optimal training windows
- guidance in the realignment and integration of training and competition for developing athletes
- guidance in offering programs that will result in a positive experience for all participants

LTAD has been devised to provide an understandable pathway for athletes from the beginner stage to high performance. It uses knowledge of growth and development and their implications for training to produce a program that enables more athletes to reach their full potential.

Effective development of the high performance athlete cannot be short term. "Scientific research has concluded that it takes eight to 10 years of training for a talented athlete to reach elite levels," says Balyi. "This is known in the scientific literature as the 10-year or 10,000-hour rule. It translates into slightly more than three hours of deliberate practice daily for 10 years. We know that a long-term commitment to training is required to produce elite athletes in all sports. Unfortunately, coaches and parents in many sports still view training with an attitude best characterized as the 'peaking by Friday' approach."

LTAD establishes guidelines for coaches, athletes, administrators, and parents in all areas, including planning, training, competition, and recovery. It takes into account the ever-changing competitive program and the overall demands on the athletes.

For LTAD to be successful means developing a sharing community in which the long-term development of athletes is at the centre of our thinking. LTAD is also about identifying potential and allowing that potential to be fully realized. It is about ensuring that everyone who wants to learn sport has that opportunity.

In a sport system that recognizes everyone in it as a lifelong physically active individual, every sport organization considers each of its members to be as asset to society and focuses on each person's long-term development. This requires a significant paradigm shift that, to be achieved, demands a strong relationship between high performance and community and school sports. With straitened resources, Canada can no longer duplicate programming. School and community programs must complement the delivery of LTAD.

Because very few clubs or schools could deliver all of the LTAD principles, a long-term approach needs to be introduced that gives clubs, provincial sport organizations (PSOs), and NSFs an LTAD template that has been refined to reflect each sport's unique requirements and incorporates the aims of LTAD (see "Cases in Point"). This approach, Balyi agrees, is a call for radical change. No longer can we say, "We have always done it this way" or "That's the way we do things in our organization."

*"The health and well-being of a nation and medals won at major Games are simple by-products of an effective sport system."*

— ISTVAN BALYI

## CASES IN POINT

The Canadian Curling Association (CCA) and Speed Skating Canada (SSC) are strong advocates of LTAD, and both organizations are committed to its implementation.

Istvan Balyi has a long history of working with the CCA's coaches and athletes in periodization and the elements of athlete development. "Istvan has developed an audience within curling and has a familiarity with our sport that gives him a sport science perspective few others have," says Gerry Peckham, CCA's manager of high performance.

Led by Balyi, national coach Elaine Dagg-Jackson, coach Melissa Soligo, and Richard Way, an LTAD pilot has been under way for several years. According to Peckham, the sport's comprehensive program structure, from Little Rock and Youth programs through to seniors, made the development of a well-articulated athlete development model attractive to the CCA's leadership. "Those four people have done a tremendous amount of work and have now produced a document that has been endorsed conceptually by our board and is ready for sport-specific expert review that rationalizes competitions to see if any adjustments are necessary, and that can be married into our coach development model," he says, adding that the document will be subjected to additional sport science support and expert opinion to ensure the production of a high-quality document.

"Curling has over one million participants at all levels, and we have a mass at the high performance end that is thirsty for additional know-how as it relates to managing their athletic careers and learning the key building blocks to their own development and the respective roles of training, competitions, and peaking," says Peckham. "Implementing LTAD is in our collective best interest, and I know it is going to have a dramatic impact in the next decade or two. The next generations of curling athletes will be developed in a much more informed manner."

SSC embarked upon LTAD early in 2003 as part of its ongoing commitment to improving the quality of its recreational and high performance programs. "We want to be the best speed skating nation in the world, and Istvan leads the world in planning and development, so LTAD was a very good fit for us," says Emery Holmik, SSC's high performance director.

SSC first put together a technical reference group that met with coaches from the different levels of the sport. Next came a workshop for all of its provincial members, executive directors, and coaching directors. The content of SSC's LTAD model was presented at the 2004 AGM and is now awaiting endorsement by the provincial organizations. Next will come the development of resources and guides for the sport's coaches, and SSC has requested financial support for Sport Canada with a view to presenting a first draft to the 2005 AGM. "It is quite a commitment on the part of SSC to develop and provide these materials, but it has to be done in order to effectively implement the LTAD principles," says Holmik. "It is absolutely critical for us as a national organization to provide our member organizations and coaches at the club, regional, and provincial levels with the resources to allow them to effectively deliver LTAD."

Holmik agrees with Balyi's assessment of the major weakness in Canada's sport system. "Istvan's reviews of NSFs showed that in most cases, the national team programs operate effectively. SSC has had success with both our short and long track programs, but the system doesn't support kids between the ages of 13 and 18 very well. We are confident that by implementing LTAD now, the results will start to show in 2010 and beyond. Adopting LTAD ensures that SSC is forward thinking and has a system of development that is strong and robust, whether or not we have a home Olympic Games."

Already several of SSC's provincial affiliates are implementing the LTAD principles. The Fédération de patinage de vitesse du Québec has reviewed the competition scheduled for younger participants in its program and is buying into LTAD's contention that youngsters should compete only in selected competitions. With support from Canadian Sport Centre Manitoba, the Manitoba Speed Skating Association is already developing its athletes in a more effective and systematic way. "LTAD has certainly had an effect already," says Holmik.

Supporting the LTAD initiative is the chain of regional training centres recently established by SSC to reach developing athletes. "We provide financial support to the centres to deliver to kids who are at Stage 3 and Stage 4 of LTAD."

## GETTING THERE

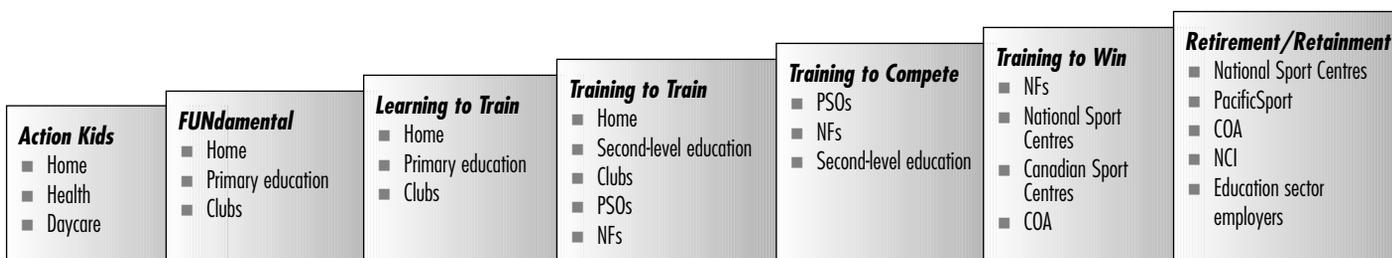
Let's examine the basic LTAD model and the principles of human growth and development upon which the LTAD framework is based.

All of the LTAD stages take into account the phases of development through which everyone passes. Stages of development from early childhood through adolescence are the same; the timing and rate of development are what differ between individuals, and these individual differences are what must be taken into account.

Changes in growth and development can be tracked using characteristics of physical, mental/cognitive, and emotional development. Human growth and development occur with or without training. Coaching programs must consider and make maximum use of the "normal" pattern of development and ensure that maximum benefit is made of the sensitive periods of trainability.

LTAD provides two models, one for early specialization sports with five main phases (FUNDamental, Training to Train, Training to Compete, Training to Win, and Retirement/Retainment) and the other for late specialization sports with seven main phases (Action

## WHERE SPORT IS PLAYED AT THE DIFFERENT STAGES





ISTVAN BALYI

Kids, FUNdamental, Learning to Train, Training to Train, Training to Compete, Training to Win, and Retirement/Retention).

Physical education should provide a proper base, known as physical literacy, of general movement skills and the technical and tactical skills for an active lifestyle. Without physical literacy, it is certain that participation in competitive and recreational sports will be inhibited and limited. If physical literacy is provided during the early stages of development, children can choose competitive or

recreational involvement in sport, or both. By providing the proper base and positive experiences, the sport system can contribute to lifelong physical activity and physical, mental, and emotional health. As well, the economic benefits of the preventive approach will be significant.

Participation in sport requires individuals to perform an array of different movements, many of which are complex, specialized skills used in specific physical activities such as the volleyball spike. However, most of the specialized skills are underpinned by the basic skills of running, jumping, and throwing. These basic movement skills are considered the building blocks for future successful performance and involvement in more specialized games, sports, dance, and recreational activities. Fundamental motor abilities are essential precursors to excellence in sport. In addition, unless a child has developed the fundamental movement and sport skills required by the age of 12, success in sport will be compromised. Contrary to earlier belief, such skills do not develop automatically. In fact, well-coordinated production of these movements occurs only with good teaching and regular opportunities to practise.

## ***THE STAGES OF LTAD — A GENERIC MODEL***

### **Stage 1: Action Kids (0–5 years)**

**OBJECTIVE:** Learn fundamental movements and link them together into play.

In Action Kids a child learns to develop simple, single movements and link them together into play. This is the time to encourage participation in a wide range of activities, particularly those that challenge the child such as gymnastics to increase coordination and music to increase rhythm. The greater the variety, the better, with a strong focus on unstructured play, which is known as “deliberate play”. All foundational activities should be included through the basic sports of gymnastics and swimming, and the run, jump, and throw programs of athletics or soccer.

### **Stage 2: FUNdamental (6–9 years)**

**OBJECTIVE:** Learn all fundamental movement skills to build overall motor skills.

Fundamental movements should be practised and mastered before sport-specific skills are introduced. The development of these skills,

using a fun and positive approach, will contribute significantly to future athletic achievements. Participation in a wide variety of sports is encouraged. The emphasis on motor development will produce athletes who have better trainability for long-term, sport-specific development.

Stage 2 should allow children to develop the ABCs of athleticism (agility, balance, coordination, and speed); the FUNdamentals of running, throwing, and jumping; overall physical, cognitive, and emotional development; awareness of as many sports as possible; and a lifelong love of sport and physical activity. This is when the basics of sport skills are learned, including travelling skills, basic object control skills, and balance movements.

Proper instruction is critical at this stage because it is difficult and time intensive to reverse incorrect movement or technique at a later stage. Children who later leave the competitive stream are well equipped by the FUNdamental stage to engage in recreational activities.

### **Stage 3: Learning to Train (9–12 years)**

**OBJECTIVE:** Learn all fundamental sport skills, including those of a favourite sport.

This is the stage of major motor learning and is when the basic movement skills should be put into a sport-specific context. Specialized movement skills are developed from ages 9 to 12 and include specialized sport skills. Bypassing this phase is likely to be detrimental to future involvement and achievement in sport.

One of the most important periods of motor development occurs between the ages of 9 and 12. This is when children are developmentally ready to acquire the general, overall sport skills that are the cornerstone of all athletic development. If they do not, a significant window of opportunity is lost, compromising the ability of young athletes to reach their full potential.

Although novice competitions should be included in Stage 3, the goals must be process, not results, and the major emphasis must be on improvement of skills and fitness.

### **Stage 4: Training to Train (12–16 years)**

**OBJECTIVE:** Optimize fitness preparation and sport-, individual-, and position-specific training.

Stage 4 is when major growth spurts occur and coincides with the period of greatest gain in aerobic capacity. In competitive sport terms, it is referred to as “training the engine”. The main emphasis must be on building aerobic capacity. The training pattern of low-intensity, high-volume work should be followed, and this requires an increase in time commitment in the training schedule. There should be single or double periodization, and specific performance-related targets should be set. Flexibility should be further developed, and strength work using own body weight and low-resistance Thera-Band, Swiss ball, and medicine ball work should continue. Toward the end of Stage 4, increased resistance work, techniques for strength training, and further mental preparation techniques can be introduced.

As with the earlier stages, if training time for improving aerobic capacity is insufficient, the athletes will never achieve their full potential.

## Stage 5: Training to Compete (16–18 years)

**OBJECTIVE:** Optimize fitness and preparation and sport-, individual-, and position-specific training.

Training to Compete is the stage at which peak strength velocity and peak weight velocity coincide with the period of opportunity for greatest strength gain. As well as continued skill and aerobic work, this stage should emphasize the development of strength and aerobic power, which are vital to optimal sport performance. Competition experience should be positive, with weaknesses identified and eradicated. Goals should be performance based, with events selected to allow a range of outcomes. Training to Compete is about training to succeed in all competitive conditions. A double or triple annual periodization program should be used.

## Stage 6: Training to Win (18+ years)

**OBJECTIVE:** Maximize fitness preparation and sport-, individual-, and position-specific skills as well as performance.

During this stage, the areas of skill, speed, suppleness, stamina, and strength are refined to produce maximum performance. Athletes should be trained to peak for specific events. Increase in range of motion will be more difficult after this stage, and maintenance of range will take more work.

The amount of competition in relation to training increases over time during Stage 6. The engine and sport skills should be in place by the time this stage has been reached, allowing for the refinement of technical skills and an emphasis on tactical skills. The mastering of tactical skills through international competitive experiences will result in podium performances. A double, triple, or multiple annual periodization program should be used.

The principles of LTAD will ensure good competitive performances at all stages, not only at the Training to Win stage. However, the optimal process of training, competition, and recovery will never be compromised by focusing on the outcome or winning.

## Stage 7: Retirement/Retention

**OBJECTIVE:** Retain athletes as coaches, administrators, officials.

This stage refers to the activities performed after an athlete has retired from competition permanently. Some athletes move into sport-related careers that may include coaching, officiating, sport administration, small business enterprises, work in the media, or masters' competition.

A strategy is necessary to ensure a smooth transition to a post-athletic career where athletes can continue to contribute to sport at some level and to facilitate the transition from highly competitive environments to self-directed enjoyment of physical activity.

## THE FUTURE

British Columbia adopted LTAD several years ago and has made significant progress in meeting Balyi's call for radical change. The most recent initiative is the establishment of Game Plan BC (see "Game Plan BC — Building Champions") to coordinate the technical programs and planning for the province's winter sports.

Led by PacificSport Vancouver president **Wendy Pattenden**, Game Plan BC consists of Balyi, sport scientist Dr. **Martin Bielz**, **Todd Allison**, general manager of the TELUS Whistler Sport Centre, and **Nicole Miller**, who handles logistics. "**Marion Lay** [president and CEO of LegaciesNow], has come up with one million new dollars on an annual basis for Game Plan BC," says Balyi. "Although most of the work with the sports will take place before 2010, we don't stop there in terms of the structural and technical improvements Game Plan BC will make. We are optimizing performance for 2010 and beyond. In the meantime, we are focusing on developing the best possible winter situation in B.C. including the opportunity to ensure integration with the national 'Own the Podium' initiative. It is a once-in-a-lifetime opportunity to fix the system now."

## GAME PLAN BC — BUILDING CHAMPIONS

### Background

Sport in British Columbia has made substantial progress in the last few years due to efforts by individual athletes, coaches, and PSOs, and with the support of PacificSport BC and the CSCs.

Historically, B.C. elite athletes and PSOs have had limited access to outside technical, scientific, and other assistance. Currently, British Columbia has no dedicated technical and research institutions for the development of winter sport excellence.

At the international level, however, some of the countries ranking immediately above and below Canada have the full benefit of specialized support institutions, making it difficult for Canada to maintain or improve its ranking internationally.

The successful bid for the 2010 Olympic and Paralympic Winter Games provides a perfect opportunity for B.C. winter sport athletes to shine. The creation of Game Plan BC is timely and will coordinate efforts toward the achievement of excellence by those athletes.

### Goal

The goal of Game Plan BC is to ensure a strong representation of B.C. athletes on the 2010 Olympic and Paralympic Games teams. Through cooperation with national initiatives, Game Plan BC will support medal-winning performances.

### Objectives

Game Plan BC is a coordinating unit for the purpose of enhancing the development of the province's winter high performance athletes. Partner agencies are B.C. PSOs, SportMedBC, PacificSport BC, the Coaches Association of BC, the National Coaching Institute (BC), NSFs, the Canadian Olympic Committee, Sport Canada, the Calgary Olympic Development Association, and national performance initiatives such as Own the Podium.

### GAME PLAN BC

- facilitates communication and the exchange of expertise among PSOs, NSFs, and their international counterparts
- distributes program money of \$1 million annually to PSOs and targeted athletes
- assists the technical staff of the PSOs in planning the technical development of athletes and teams
- assists PSO staff in monitoring and evaluating the performances and results of individual athletes and teams
- disseminates research materials pertaining to training methodology
- coordinates support services with other agencies for high performance programs
- facilitates the reporting of overall and sport-specific reports and evaluation documents of organizations, teams, and athletes
- develops policy recommendations for decision-makers in the area of high performance sport



Revamping a sport system to encompass LTAD is an ambitious but achievable undertaking. England and Ireland are far along in the process, with both countries now working on a coach development model that will be aligned with LTAD. It is worth noting that a major shift in emphasis makes a priority of the development of coaches to specialize in LTAD's first three stages. In England, major sports such as Rugby Union, cricket, tennis, swimming, and canoeing have all completed LTAD, based on the British Columbia model.

As the experiences of Speed Skating Canada and the Canadian Curling Association suggest, LTAD is indeed catching hold in this country. Sport Canada's commitment to system-wide financial support has enormous implications. Although LTAD will undoubtedly lead to the development of Olympic champions, it is above all about the creation of a foundation for lifelong physical activity. Balyi insists that physical education, school sports, recreational activity, and high performance sport are

interdependent. "We have to develop each aspect strategically to ensure that we will have both a healthy population and Olympic and Paralympic medallists," he says.

Enough evidence exists to suggest that the adoption of LTAD could turn the Canadian sport system upside down and be a major contributor to achieving the goal of Canada as a leading sport nation. ✎

**Sheila Robertson** is the editor of *Coaches Report* and the *Canadian Journal for Women in Coaching*. **Richard Way** was a racer and coach with the *Canadian luge team* and is an *NCCP Level 5 coach with an NCI diploma*. He has been the *Manager of Coaching in B.C.*, in one phase of the *2010 Bid* was the *Director of Sport*, and is now *Director of Sport Performance in B.C.* An *MBA candidate*, he works internationally on *LTAD*.



Ad