

# RETHINKING HOW WE ENGAGE UTAH'S YOUTH IN SPORT

A New, Collaborative and FUNdamental Approach

Presented by the Utah Athletic Foundation  
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[www.UtahSportForLife.com](http://www.UtahSportForLife.com)



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## INTRODUCTION

### Why is the Utah Athletic Foundation Interested in a New Approach to Youth Sport?

Following the successful hosting of the 2002 Olympic Winter Games, the Utah Athletic Foundation (UAF) was formed to nurture a legacy of Olympic winter sports in Utah. Over the years, our organization has carefully debated the question: What truly defines an Olympic legacy?

Legacy, we argue, isn't strictly a matter of operating and maintaining our world-class Olympic venues. True Olympic legacy means filling those venues with healthy activity and generating community involvement. As an entity that engages thousands of kids each year in numerous winter sports programs, the Utah Athletic Foundation has spent significant time over the past year reviewing our own approach to athlete development as well as learning from many others. We discovered numerous common challenges amongst us and are invigorated by the shared interest in addressing solutions together.

As we invested resources and worked with community stakeholders, our efforts exposed challenges and provided exciting opportunities for us to work with Utah's sport, recreation and health systems in a better way. We believe that a successful collaboration will not only improve the quality of our programs, but will help battle the rising trend of inactivity of the general population.

The way in which we engage kids and teach sports has powerful implications for the entire population of Utah. Our interests as Utah's Olympic Legacy Foundation are simple: to create physical literacy in all Utah children and to improve the health of all Utahns through long-term participation in sports.

The development of fundamental sport skills is falling through the cracks – even at the elite level. Numerous U.S. national team coaches lament an increasing lack of basic skills in individuals, which is putting our athletes behind international competitors.

Successful sports and recreation programs are fun, inclusive, and allow for a well-rounded development of fundamental movement and sports skills that build confidence and allow for a natural progression of athletic skill.

More than ever before, specialization in one sport, detached parental involvement, and a lack of systematic coaching education is severely challenging our collective systems. For school-aged children, physical activity is pushed to the back burner for reasons ranging from demanding academic testing regimes to a lack of school and community resources that do not fully address children's need to be active and healthy.

Thankfully, Utah organizations have already begun discussing the issues of prioritizing physical fitness and the need to teach fundamental movement and sport skills to our youth. To provide a framework for teaching, the UAF is actively working to develop a "Utah Sport for Life" model. Based on best practices, this model looks to employ a community-wide effort to elevate Utahns' quality of life through lifelong participation in sport and recreation. ***And we need your help.***

The 2009 Utah Sports Summit is our first attempt at engaging a broader group of interested organizations in this conversation. We truly believe that a successful collaboration will result in a workable model where Utah's children become more physically fit, more engaged in sport, and better able to maintain a healthy level of fitness throughout their lives.

### The Utah Athletic Foundation's Goals are to:

1. **Identify and share perspectives on how to best run youth sport and physical activity programs.** We will do this by reaching out and collaborating with a broad set of sports, recreation, and health organizations in Utah.
2. **Introduce the concept of Long-Term Athlete Development (LTAD)** into our own UAF Sports Programs and share this fundamental sport philosophy with others in Utah.
3. **Develop a Utah model for how we engage Utah's youth in sport and physical fitness programs.** This model will be branded "Utah Sport for Life," and will incorporate a blend of best practices happening around the state as well as Long-Term Athlete Development (LTAD) concepts that work for our collective communities.
4. **Identify specific areas where the Utah Athletic Foundation could fill a unique niche and/or program void.** Our role will be defined over time by listening to ideas, sharing stories, inviting feedback, and integrating our efforts.
5. **Effectively improve the program quality of youth sport efforts in Utah.** The end result of these improvements will result in a population more engaged in physical activity and a better pipeline of athletes seeking their highest potential.
6. **Increase coordination, alignment, and effectiveness** of Utah's sport, recreation, and health-related organizations.
7. **Create physical literacy in all Utah children** and improve the health of all Utahns through long-term participation in sports.

## CHALLENGES WE ALL FACE

When the Utah Athletic Foundation (UAF) began a major project to reinvigorate its athlete development program, we became concerned by both a lack of fundamental skills at all levels of sport and the rising trend of inactivity of Utah's youth. As we discussed these challenges with other members of the community – from educators to National Governing Bodies – we realized the need to synchronize our road maps and philosophies of athlete development.

Our discussions revealed a laundry list of common challenges to creating a community of lifelong athletes:

**Too much technology** means increased daily screen time (TV, computers, video games) and decreased active physical play time.

**Lack of physical activity** threatens Utah's children by putting them at increased risk for obesity, which has increased by 28 percent in the past five years. Nearly one in four elementary-age children is overweight or at risk of being so, according to the Utah Department of Health.

**Poorly designed communities** result in kids spending more time in the family car and less time moving their bodies to get to school, home, or businesses.

**Burn out hits kids earlier and earlier** as parents and coaches push for increased specialization and increased focus on competition. Kids who feel they can't win opt out or get pushed out by coaches who would rather win than teach the value of learning skill and technique.

**Many athletes spend too much time competing, traveling, and resting**, and not enough time training and practicing (over-competing and under-training).

**Physical education in schools is no longer a priority** and many of Utah's school systems lack trained physical education professionals.

**After-school activities don't flourish** due to high costs, lack of funding, difficulty in getting access to school property after school hours, and the high cost of transportation to activities.

**Programs often rely on volunteer coaches, usually parents with limited expertise** and little familiarity with how children develop physically, mentally, cognitively, or emotionally. They are also not provided with proper guidance or direction.

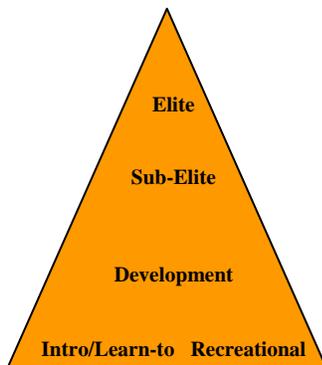
**One-size fits all training programs** don't take into account age and gender. Adult training programs are imposed on children and programs tailored for boys' development are used for girls. Children are not small adults and girls develop differently than boys.

**The “get them early and keep them” mindset** of bringing children into one sport and keeping them in that single sport for as long as possible restricts a child’s development of a range of physical literacy skills (fundamental sport skills) and diminishes his or her all-around athletic development. It also prevents children from experimenting with different sports and finding the one that is just right for them. Long-term, both the sports and the children are hurt by this approach.

**A lack of integration of programs at the club, recreation, state and national levels** does not facilitate sport for life. Coaches of different teams and different sports often compete for an athlete’s time and effort, leading to scheduling conflicts and the over-training of athletes.

We hope to overcome a lack of fundamental skills in our youth by engaging members of our community and state and working to develop solutions to these problems.

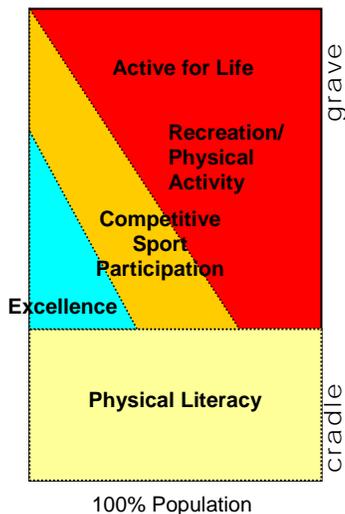
## RETHINKING THE OLD ATHLETE DEVELOPMENT MODEL



Sport organizations often use a pyramid to represent athletes involved in a particular sport. The pyramid shows that the majority of athletes are in the “learn to” and “recreation” categories with fewer athletes making it to the elite level. The pyramid, like the one shown, excludes a majority of the population and illustrates that a sport’s main focus is developing elite-level athletes.

The problem is that this model is exclusionary and does not take into consideration the need for youth to develop basic skills so that throughout their life they will participate in sport for health and fun. With this single-minded desire to work only with the best, the majority of the population is dropping out or not participating at all in sport.

## UTAH SPORT FOR LIFE: A FUTURE MODEL FOR HOW WE ENGAGE UTAH'S POPULATION IN SPORT



The “Utah Sport for Life” model focuses on the general framework of Long-Term Athlete Development with special reference to growth, maturation and development, trainability, and sport system alignment and integration. It will incorporate information from a number of sources and draw on the experiences of community organization’s best practices.

The new model is inclusive and allows for continued participation whether you are an elite athlete or someone who loves to play because it’s fun. The difference between this new model and the old, is that the bottom level emphasizes the importance of teaching physical literacy to the entire population. Once the fundamentals are learned, everyone can stay involved in sports long-term. In this new paradigm, there is no point at which a person is eliminated from participating in physical activity.

With your input we will outline how we engage our population in sports and physical activity (particularly in our youth ages 3 – 16) and roll out Utah Sport for Life state-wide.

### “Utah Sport for Life” Will Represent:

- A philosophy that creates tools for change and a pathway to develop athletes and participants.
- Equal opportunity for recreation and competition.
- A way of identifying the current gaps in the sport system and providing guidelines for problem solving and collaboration.
- A framework for full sport system alignment that integrates health and education with sport and physical activity.
- Practical coaching experiences and proven scientific principles.
- A way of promoting and developing an active, healthy lifestyle for Utah’s youth

The Utah Sport for Life model will focus on our youth, yet it will identify the importance of including the entire population within a sport model. Too often, sport models focus the majority of funding and expertise on the portion of the population striving to be elite-level athletes. “Utah Sport for Life” will emphasize the importance of every level and ability.

Participation in sport teaches lessons like teamwork, fair play and goal setting. It’s also a main ingredient in maintaining a healthy body and a healthy community, making this all-inclusive approach integral to the success of this model. The Utah Sport for Life guide will be the result of countless discussions and input from Utah individuals involved in a wide range of sport (and non-sport) organizations.



## PHYSICAL LITERACY IS THE NAME OF THE GAME

Physical literacy is at the heart of the Utah Sport for Life model. Being physically active is more important to health than virtually any other part of life over which we have control. A University of Michigan School of Public Health and Albert Einstein University Study suggest that it is better for your health to be overweight and active than to be of normal weight and be inactive.

For this reason alone, it is critical that children develop the knowledge, skills and attitudes that give them the very best chance of staying active throughout their lives.

When a child has confidence in his or her ability to take part in recreational and sporting activities, the probability that he will join in is high. If he enjoys the activity, he will likely continue to participate. A child's movement confidence develops gradually as he grows and learns, and the child is constantly comparing his own level of ability with the ability of the children with whom he plays.

Physically literate children who move with skillful purpose know that they move well. This confidence encourages them to try new and different activities without fear.

Physical literacy also provides a foundation from which sporting excellence can grow. To develop the highest levels of sporting excellence requires about 10 years of deliberate practice. An athlete involved in sports such as hockey, alpine skiing and soccer must first develop and refine her athletic abilities before she specializes in sport-specific techniques and skills.

All too often, early over-specialization in a single sport leads to a failure to become physically literate, poorer ultimate performance (than would otherwise be the case), injury, burnout and early retirement from sport. Physical literacy is, therefore, the key both to developing habits of lifelong physical activity for enjoyment and health, and to the development of world-class athletes.

Physical literacy is the combination of the development of fundamental movement skills and fundamental sport skills that permit a child to move confidently and with control, in a wide range of physical activities, rhythmic (dance) and sport situations. Physical literacy also includes the ability to "read" what happening around you in an activity and to assess and react appropriately to those events.

Physical literacy is developed during the first three stages of the Seven Stages of Long-Term Athlete Development, on which the Utah Sport for Life model is based. These three stages go from birth to the start of adolescence: approximately age 11 for girls and to age 12 for boys.

## The Right Start

Learning and practice of fundamental movement skills are the basic building blocks for the development of physical literacy. While it is true that many children DO develop physical skills on their own, there are many who do not; and for those the consequences can be severe.

Children who are physically skilled enjoy vigorous healthy play while the less skilled are often left out. This creates a vicious cycle. Those with the skills play, and through that play further develop their fitness and skill.

In contrast, those who are less skilled play less, have fewer opportunities to refine and develop their skills, and fall farther and farther behind their skilled peers. Eventually many of the less skilled children stop trying, and withdraw from physical activities that would help them become fitter and develop their skills.

To prevent this from happening, appropriate physical literacy needs to be taught to every child in Utah, which is where community recreation and sport programs come into play. Community recreation programs for pre-pubescent children could be organized to ensure that children are enrolled in general programs that cover a range of physical literacy skills, rather than single sport programs.

Sport programs offered by minor sport organizations are obviously going to focus on their own sport, but could do a much better job of teaching broad physical literacy skills (particularly in warm-ups and small-game activities), rather than teaching over-specialized, sport-specific skills in isolation.

## What This Means for Parents

Ultimately the responsibility for developing a physically literate child rests with parents and guardians. Just as parents and guardians ensure their children are in learning situations that result in them having the ability to read, write and do mathematics, they must also ensure their children develop physical literacy.

Parents and care-givers play a vital role in exposing their children to all of these activities during the critical physical literacy years. However, in communities with limited recreational opportunities (and for parents with limited financial resources) this may be difficult to achieve. Therefore, school physical education and park and recreation programs play a crucial role in developing physical literacy in EVERY Utah child.

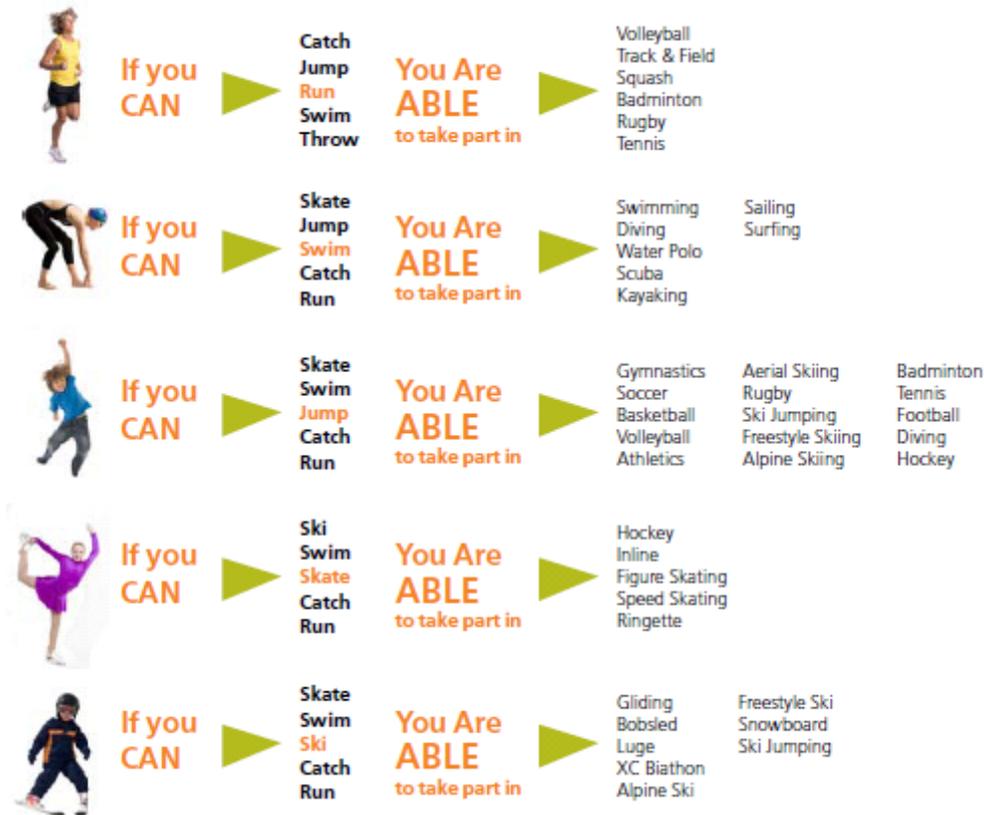
## Building Fundamental Movement Skills

To become physically literate, children need to master fundamental movement skills. These are basic movements that are the building blocks for sport skills. For example: in this stage, children learn a basic kicking action with each foot. They kick a wide variety of balls and try different things such as kicking as far as they can, kicking to hit a target, kicking to keep the ball on the ground or high in the air. It seems simple enough, however, mastery of fundamental movement skills does not come all at once and we need to remember that children are not just “miniature adults.” The goal here is to help each child move to the next most mature version of the skill he is learning, rather than pushing him to perform the skill like an adult.

## Building Fundamental Sport Skills

Sliding, gliding, running, jumping, catching, kicking, throwing, and hitting something with a stick, bat, or racquet of some kind, are the basic building blocks of the many sports played by the vast majority of people on earth. A person who can perform these fundamental sport skills well can learn to play many sports with ease. Making good decisions in sport situations is another skill fundamental to each sport.

The following chart illustrates the concept that by teaching children to become physically literate and showing them what they CAN do, they stand a much better chance of continued participation in physical activity and sport.



## The Difference between Fundamental Movement Skills and Fundamental Sport Skills

Throwing is a fundamental movement skill. A child learning this skill will learn to throw lots of different sized balls with one hand, or with both hands, and will learn to throw the ball at different targets at different speeds – sometimes for accuracy, sometimes for distance.

When the child learns to throw a baseball, using a baseball pitching motion and trying to get the ball to pass over home plate, he has moved from a fundamental movement skill to a fundamental sport skill.

A child should learn fundamental movement skills and fundamental sport skills in each of the five basic environments:

### on the ground

most games, sports, dance and physical activities occur here

### in water

basis for aquatic activities

### on snow

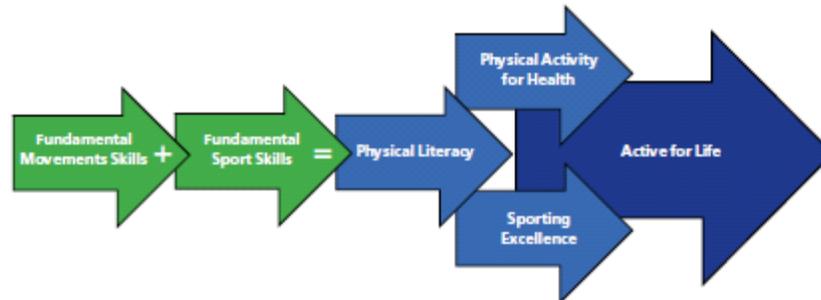
basis for skiing sports

### on ice

basis for skating and sliding activities

### in the air

basis for gymnastics diving and other aerial activities



Research shows that without the development of physical literacy, many children and youth withdraw from physical activity and sport and turn to more inactive and/or unhealthy choices during their leisure time.

## THE SEVEN STAGES OF LONG-TERM ATHLETE DEVELOPMENT



### INTRODUCTION

To promote a child’s healthy and logical development in sport and physical activity, the Utah Athletic Foundation acknowledges sequential stages for training and competition that respect physical, mental and emotional development.

This approach encourages lifelong physical activity for athletes of all levels of ability and also provides an effective route for those that choose to pursue excellence at the national and international level of competition.

The number of stages differs slightly between early specialization and late specialization sports.

The basic 7-stage pathway for the majority of sports follows here:

## STAGE 1: ACTIVE START

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

**Ages: Boys and girls 0 – 6 years**

From ages 0-6 years, children need to be introduced to relatively unstructured play that incorporates a variety of body movements. An early active start enhances development of brain function, coordination, social skills, gross motor skills, emotions, leadership, and imagination. It also helps children build confidence, develop posture and balance, build strong bones and muscles, promote healthy weight, reduce stress, improve sleep, learn to move skillfully, and learn to enjoy being active.

Physical activity should be fun and a part of the child's daily life, not something required. Active play is the way young children are physically active. Because this is a period when children rapidly outgrow their mobility aids, communities need to find effective ways — equipment swaps or rentals, for example — to ensure that all children have access to the equipment they need to be active.

### Active Start Goals

- Provide organized physical activity for at least 30 minutes a day for toddlers and at least 60 minutes a day for preschoolers.
- Ensure that games for young children are non-competitive and focus on participation.
- Provide unstructured, active physical play for at least 60 minutes a day and up to several hours per day for toddlers and preschoolers. (Toddlers and preschoolers should not be sedentary for more than 60 minutes at a time except while sleeping.)
- Provide infants, toddlers, and preschoolers with opportunities to participate, rain or shine, in daily physical activity that promotes fitness and movement skills.
- Provide parents and caregivers with age-appropriate information.
- Encourage basic movement skills. These skills do not just happen as a child grows older. They develop depending on each child's heredity, activity experiences, and environment. For children with a disability, access to age and disability appropriate adapted equipment is an important contributor to success.
- Focus on improving basic movement skills such as running, jumping, twisting, wheeling, sliding, gliding, kicking, throwing, and catching. These motor skills are the building blocks for more complex movement.
- Design activities that help children to feel competent and comfortable participating in a variety of fun and challenging sports and activities.
- Because girls tend to be less active than boys, ensure that activities are gender-neutral and inclusive so that active living is equally valued and promoted for all children.

Early childhood educators have become increasingly aware that movement plays an important role in the healthy development of a young child. In particular, the development of rhythmic activities during this critical period assists in the enhancement of coordination, language and reading, voice reproduction, intelligence, and future complex movement patterns.

## STAGE 2: THE FUNDAMENTALS

**Key Objectives: Learn all fundamental movement skills and build overall motor skills in an atmosphere of FUN.**

**Age: Girls 6 – 8; Boys 6 – 9**

Children need to participate in a variety of well-structured activities that develop basic skills. However, activities and programs need to maintain a focus on fun. Formal competition should only be minimally introduced at this age.

Skill development in the FUNdamentals stage should be well-structured, positive, and FUN! The first window of accelerated adaptation to speed occurs between the ages of 6 to 8 for girls and 7 to 9 for boys. Bypassing the specialized skill development in the FUNdamentals stage is detrimental to the child's future engagement in physical activity and sport.

No periodization, or time management takes place; however, all programs are structured and monitored.

### FUNdamentals Goals

- Practice and master fundamental movement skills before sport-specific skills are introduced.
- Encourage participation in a wide range of sports, introducing children to the simple rules and ethics of sports.
- Teach the ABCs of athleticism: **A**gility, **B**alance, **C**oordination, and **S**peed.
- Using the ABCs of athleticism, teach appropriate and correct running, wheeling, jumping, and throwing techniques.
- Introduce basic flexibility exercises and develop speed, power, and endurance using games.
- Develop linear, lateral, and multi-directional speed with the duration of repetitions less than 5 seconds.
- Include strength training exercises using the child's own body weight as well as medicine ball and Swiss ball exercises.
- Ensure that sporting and disability equipment are size, weight, and design appropriate and that communities explore ways to share and provide access to appropriate equipment.

- Ensure that activities revolve around the school year and are enhanced by multi-sport camps during summer and winter holidays.
- Emphasize motor development to produce athletes who have a better trainability for long-term, sport-specific development.
- Participate once or twice a week if children have a preferred sport, so long as there is participation in many other sports 3 or 4 times per week to ensure future excellence.

For children who decide not to pursue the competitive stream long-term, the skills they acquire during the FUNDamentals stage will benefit them when they engage in recreational activities, enhancing their quality of life and overall health.

According to “The Path to Excellence: A Comprehensive View of Development of US Olympians who competed from 1984-1998,” youth sport programs that emphasize fun, enjoyment and love of sport provide a springboard for athletes to continue their development upward.

### STAGE 3: LEARNING TO TRAIN

**Key Objective: Learn overall sports skills.**

**Age: Girls 8 – 11; Boys 9 – 12**

One of the most important periods of motor development for children is between the ages of 9 and 12. This is a window of accelerated adaptation to motor coordination. At this stage, children are developmentally ready to acquire the general sports skills that are the cornerstones of all athletic development.

From ages 8-11 in girls and 9-12 in boys to the onset of the growth spurt (usually around the ages of 10-12 for girls and 12 – 14 for boys), children are ready to begin training according to more formalized methods. However, the emphasis should still be on general sports skills suitable to a number of activities.

While it is often tempting to over-develop “talent” at this age through excessive single sport training and competition (as well as early positioning in team sports), this single-sport approach can be very detrimental to later stages of development if the child is playing a late specialization sport. It promotes one-sided physical, technical, and tactical development and increases the likelihood of injury and burnout.

#### Learning to Train Goals

- Further develop all fundamental movement skills and teach general, overall sports skills. Otherwise, a significant window of opportunity is lost, compromising the ability of the young player/athlete to reach full potential.
- Apply a ratio of 70% training to 30% competition. The 30% ratio includes competition and competition-specific training. These percentages vary according to sport and an individual’s specific

needs. Athletes undertaking this type of preparation are better prepared for competition in both the short- and long-term than those who focus solely on winning.

- Develop strength using exercises that incorporate the child's own body weight as well as medicine balls and Swiss balls.
- Introduce hopping and bouncing exercises or routines, or wheeling up gradients, to aid in strength development.
- Further develop endurance through games and relays, flexibility through exercises, and speed through specific activities that focus on agility, quickness, and change of direction.
- Structure competition to address differences in training age and abilities.
- Identify three sports the child enjoys and is predisposed toward success.
- Introduce single periodization noting that some sports, such as swimming and tennis, need to use double periodization to adequately address the sport's unique needs.
- Continue to encourage unstructured play.

Note: A Utah Athletic Foundation survey, which polled 120 elite American and international athletes, revealed that all of the athletes surveyed participated in more than four sports (including the sport in which they made the national team) between the ages of 10 and 12.

## STAGE 4: TRAINING TO TRAIN

**Key Objectives: Build an aerobic base, develop speed and strength toward the end of the stage, and further develop and consolidate sport-specific skills.**

**Age: Girls 11 – 15; Boys 12 - 16**

The ages that define this stage for boys and girls are based on the onset and end of the growth spurt. At this stage, they are ready to consolidate their basic, sport-specific skills and tactics. These youths may play to win and do their best, but they still need to focus more time on skill training and physical development than competition. This approach is critical to the development of top performers and maintaining activity in the long term, so parents should check with their national organization to ensure their child's program has the correct training-to-competition ratio (60% training to 40% competition in this age group).

During Training to Train, young athletes consolidate their basic sport-specific skills and tactics. This is a window of accelerated adaptation to aerobic, speed, and strength training.

Optimal aerobic trainability begins with the onset of **Peak Height Velocity (PHV)**, the major growth spurt during maturation.

During competitions, athletes play to win and do their best, but the major focus of training is on learning the basics as opposed to competing.

## Training to Train Goals

- Make aerobic training a priority after the onset of PHV while maintaining or further developing levels of skill, speed, strength, and flexibility.
- Be aware that both aerobic and strength trainability are dependent on the maturation levels of the athlete. For this reason, the timing of training emphasis differs depending on whether athletes are early, average, or late maturers.
- Emphasize flexibility training given the rapid growth of bones, tendons, ligaments, and muscles.
- Consider the two windows of accelerated adaptation to strength training for females: the first occurs immediately after PHV and the second begins with the onset of menarche. For males, there is 1 window and it begins 12 to 18 months after PHV.
- Apply a ratio of 60% training to 40% competition. Too much competition wastes valuable training time and yet not enough inhibits the practice of technical/tactical and decision-making skills.
- Select two sports.
- Utilize single and double periodization as the optimal framework of preparation.

The Learn to Train and Training to Train stages are the most important stages of athletic preparation. During these stages, we make or break an athlete.

## STAGE 5: TRAINING TO COMPETE

**Key Objectives: Optimize the engine and learn to compete.**

**Age: Females 15 – 21+ ; Males 16 – 23+**

Depending on the sport, this is where things get “serious.” Athletes can either choose to specialize in one sport and pursue a competitive stream, or they can continue participating at a recreational level and thereby enter the Active for Life stage. In the competitive stream, high volume and high intensity training begins to occur year-round.

In this stage, athletes optimize fitness preparation and sport-, individual-, and position-specific skills as well as performance.

All the objectives of Training to Train must be achieved before the objectives of Training to Compete can begin.

## Training to Compete Goals

- Provide year-round, high intensity, individual event and position-specific training.
- Teach athletes, who are now proficient at performing basic and sport specific skills, to perform those skills under a variety of competitive conditions during training.
- Place special emphasis on optimum preparation by ‘modeling’ high competitions in training.
- Individually tailor to a greater degree fitness programs, recovery programs, psychological preparation, and technical development.
- Emphasize individual preparation that addresses each athlete’s individual strengths and weaknesses.
- Select 1 sport.
- Utilize single, double, and triple periodization as the optimal framework of preparation.
- Apply a ratio of 40% training to 60% competition. Devote 40 percent of available time to the development of technical and tactical skills and improving fitness and 60 percent of training to competition and competition-specific training.

## STAGE 6: TRAINING TO WIN

**Key Objective: Podium performances.**

**Age: 18+ in Females; 18+ in Males**

Training to Win is the final stage of athletic preparation. At ages 19+ in males and 18+ in females, elite athletes with identified talent enter a stage where they may pursue the most intense training suitable for winning performances at the international level. At this stage, both world-class athletes with a disability and able-bodied athletes require world-class training methods, equipment, and facilities that meet the demands of the sport and the athlete.

This is where you want to maximize fitness preparation and sport-, individual-, and position-specific skills as well as performance.

The entire athlete’s physical, technical, tactical (including decision-making skills), mental, personal and lifestyle capacities are fully established and the focus of training has shifted to the maximization of performance.

World-class, able-bodied and disability sport performances require world-class equipment that is fine tuned to the demands of the event and the requirements of the athlete.

## Training to Win Goals

- Train athletes to peak for major competitions.
- Ensure that training is characterized by high intensity and relatively high volume.
- Allow frequent preventative breaks to prevent physical and mental burnouts.
- Utilize single, double, triple, and multiple periodization as the optimal framework of preparation.
- Change the training-to-competition ratio to 25:75, with the competition percentage including competition-specific training activities.

## STAGE 7: ACTIVE FOR LIFE

**Key Objective: A smooth transition from an athlete's competitive career (at any level) to lifelong physical activity.**

**Age: Any**

Young athletes can enter this stage at essentially any age. If children have been correctly introduced to activity and sport through Active Start, FUNdamentals and Learning to Train programs, they will have the necessary motor skills and confidence (physical literacy) to remain Active for Life in virtually any sport they like. They may decide to continue playing their sport at the recreational level, or they may become involved in the sport as a game official or coach. They might also try new sports and activities: examples could be a hockey player taking up golf or a tennis player starting to cycle.

The Utah Sport for Life model also encourages athletes to move from one sport to another. For example, the gymnast becomes an aerial skier, the sprinter takes up bobsledding, or the 12-year-old basketball player discovers rugby.

A positive experience in sport is the key to retaining athletes after they leave the competition stream. Sport must make a paradigm shift from cutting athletes to re-directing them to sports where they are pre-disposed to train and perform well.

## 10 KEY FACTORS IN LONG-TERM ATHLETE DEVELOPMENT

The following factors are a basic summary of the research, principles and tools upon which Long-Term Athlete Development (LTAD) models are built.

### 1. Physical, Mental, Emotional, and Cognitive Development

Long-Term Athlete Development provides the model for matching training, competition, and recovery programs to the physical, mental, cognitive, and emotional development of each athlete. Ethics, fair play, and character building should also be taught according to each child's ability to understand these concepts at different ages.

### 2. The Fundamentals

The FUNdamentals are basic movement and sport skills taught through fun games and activities that engage small children and motivate them to continue in any given activity. While these basics are fun in nature, they also serve another purpose: they teach the essential skills required as a foundation for more complex physical activities and sports. It is important that all children develop a good base of these skills before puberty to optimize both future performance and lifelong activity.

### 3. Development Age

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 changes in quantity and measurable changes in body size such as height, weight, and fat percentage. Maturation refers to qualitative system changes, both structural and functional, in the body's progress toward maturity, such as the change of cartilage to bone in the skeleton.

Development refers to the interrelationship between growth and maturation in relation to the passage of time. The concept of development also includes the social, emotional, intellectual, and motor realms of the child. Chronological age refers to the number of years and days elapsed since birth. Children of the same chronological age can differ by several years in their level of biological maturation.

### 4. Trainability

Trainability refers to the sensitive periods for adaptation to training – a period when training makes a big difference. These periods are often called the “windows of trainability.” It should be noted that during the sensitive periods, the windows are wide open.

Outside of the sensitive periods, the windows are partially closed, but never fully closed. A person can learn to play golf at age 60, but the rate of improvement will not be the same as the sensitive periods prior to the onset of the growth spurt.

## 5. Specialization

Sports are classified into three categories: early specialization, early introduction-late specialization, and late specialization. Early specialization sports such as gymnastics, diving, and figure skating require children to learn complex skills earlier since it is very difficult to fully master these skills if they are introduced after puberty.

Early introduction to many sports is key. The ability to glide on skis, if not learned at an early age, is much harder to accomplish as the child grows older. Fine motor skills take time to develop and are required in such sports where quick reaction time is needed. Late specialization sports such as soccer, hockey, basketball, and skeleton can still be mastered if specialization begins between the ages of 12 and 15, but it is essential that these athletes have already acquired physical literacy prior to adolescence.

### **Specializing before the age of 10 in late specialization sports contributes to:**

- a. One-sided, sport-specific preparation
- b. Lack of basic movement and sports skills
- c. Overuse injuries
- d. Early burnout
- e. Early retirement from training and competition
- f. Completely dropping out of participation in sport

## 6. Ten-Year Rule

Scientific research has concluded that it takes a minimum of 10 years and 10,000 hours of training for a talented athlete to reach elite levels. The athletes reaching that peak level do so because of a combination of time dedicated to training and a genetic predisposition for the sport. For athlete and coach, this translates into slightly more than 3 hours of training or competition daily for 10 years.

## 7. System Alignment and Integration

Utah Sport for Life understands the need to work to get organizations and individuals invested in health, education and sport on the same page and following the same vision. Because many different institutions, agencies, and groups are involved in delivering sports programs, Utah Sport for Life recommends that parents, teachers, schools, coaches, clubs, recreation centers, and governments coordinate their efforts for the greatest welfare of the children in their programs.

Physical educations in schools, along with park and recreation programs are the best organizations to provide and ensure physical literacy.

All organizations own a portion of the long-term athlete development pipeline and can ensure that the programs and training are age and developmentally appropriate.

## 8. Calendar Planning for Competition

Optimal competition calendar planning at all stages is critical to athlete development. At certain stages, developing physical capacities takes precedence over competition. At later stages, the ability to compete well becomes the focus.

In individual sport, there are generally no issues with over-competing and under-training. In team sports, however, the training to- competition ratio is low since there is a tendency play too many games and not practice. Training and competition ratios should be adjusted to provide optimal technical, physical, tactical and mental preparation for the long-term benefit of the players.

## 9. Periodization

Simply put, periodization is time management. As a planning technique, it provides the framework for arranging the complex array of training processes into a logical and scientifically-based schedule to bring about optimal improvements in performance.

## 10. Continuous Improvement

The concept of continuous improvement, which permeates Utah Sport for Life, is drawn from the respected Japanese industrial philosophy known as Kaizen. Continuous improvement ensures Utah Sport for Life is constantly reviewed and improved based upon new input and research from the sport and medical community.

## ATHLETES WITH A DISABILITY

Athletes may have been born with a disability (congenital disability) or may have acquired a disability later in life. Children with a congenital disability may not have the same opportunity to learn FUNDamental movement skills as their able-bodied peers because they do not always have the same opportunities for vigorous, physical play during their early years (Active Start). This is sometimes due to long periods of hospitalization and the lack of suitable physical education programs, but may also be due to parents or caregivers being overly protective, a situation that can also occur with an acquired disability.

Athletes with a disability may operate in a sport environment in which there are participants not found in able-bodied sport. For example, runners who are blind need sighted guides and most sports require officials who determine the classification or division of competition into which the athlete best fits to ensure fairness of competition. Failure of the sport system to develop these supporting roles will have a long-term negative impact on athlete development and the competition experience.

Many disabled athletes require adapted equipment or facilities to take full advantage of their athletic ability and to minimize the sport-performance impact of their disability. Because there may be only a few other athletes with a disability with the same type and/or level of disability, access to appropriate competitive experiences may be difficult. Some athletes with a disability require personal care, support, interpreters, and other personnel not found in able-bodied sport. While there are many similarities between athletes with a disability and able-bodied athletes, there are some differences that change the Long-Term Athlete Development (LTAD) process.

For athletes with a disability, the Utah Athletic Foundation acknowledges two additional stages in the long-term athlete development model:

### Awareness Stage

The period following acquisition of a disability is one of transition and great change for most individuals. Some activities in which they were previously engaged may no longer be open to them in the same form, and they may not be aware of the many sporting and recreation activities that are available.

Sport opportunities for people with a disability are not always well known and someone who acquires a disability may have no knowledge of what sports are available. Sports need to develop awareness plans to make their offerings known to prospective disabled athletes.

### First Contact/Recruitment Stage

The purpose of this stage is to inform individuals of the range of activities in which they can participate and to provide ways for them to experience those activities. Sports only have one opportunity to create a positive environment for prospective athletes with a disability. It may not be easy for them to make the first approach to a sport, and research shows that if they don't have a positive first experience, they may be lost to the sport and to a healthy lifestyle. *Note:* Athletes who retire from disability competition need to be encouraged to remain involved in the sport as coaches, program volunteers, fundraisers, mentors, or officials.

## THE NEXT STEP: SUCCESS THROUGH COLLABORATION

The Utah Athletic Foundation is excited by the opportunity to further collaborate on a project that not only streamlines our winter sport athlete pipelines, but also nurtures a community of lifelong athletes. The creation of this document and gatherings like the 2009 Sports Summit are simply the first steps in the process of reviewing and redefining the way we, as a community, shape our youth in sport.

The success of defining a “Utah model” depends on every stake holder’s commitment to making it work. Continued discussions and learning from one another as we put Utah Sport for Life strategies into practice, can only strengthen the overall system. We hope that you are interested in joining us.

The Utah Athletic Foundation will utilize meetings, summits, and the distribution of a future Utah Sport for Life resource guide (targeted for a December 2009 completion) as a means to outline added details of our discussions with a broadened network of organizations throughout Utah. Through these gatherings and a shared dialogue, a prioritized list of actionable projects and pilot programs will be assembled. Your input and involvement in the creation of this prioritized set of actions plans is crucial. We encourage you to be an active member in the process and to continuously provide us feedback as we go. Thank you in advance for your help in this process.

At the Utah Athletic Foundation, we have set clear goals but know we cannot achieve them without your help. We look forward to working with you to address our common problems and devise strategies that will mean success for us all.

**Your assistance is requested.** We kindly ask you to:

1. **Complete a Survey**

We would like to hear your thoughts and perspectives on what you feel works well – or not so well – in sports, recreation, and health-related programs in Utah. We would also like your feedback regarding what you like about the Long-Term Athlete Development (LTAD) concepts and the idea of creating a Utah Sport for Life Model. Please complete the survey found at [www.utahsportforlife.com](http://www.utahsportforlife.com) by October 31<sup>st</sup>.

2. **Share this Document with Others**

If you know of anyone who might be interested in joining this effort, please encourage them to contact us. Everyone’s input is welcome.

3. **Keep the Feedback Coming**

Beyond completing the survey and helping us connect with others, know that we are looking forward to follow-up communications and meetings to better partner with you on common interests. We ask that you regularly provide us input, with special emphasis on the creation of strategies and program ideas before the end of this calendar year.

4. **Work Together in 2010 and Beyond**

Once actionable strategies are defined, we will look for your assistance in implementing them.

## ACKNOWLEDGMENTS

This document is our way of providing background information about what the UAF has come to believe are the cornerstones of successful athlete development and how to keep participants effectively engaged in physical activity.

The Utah Athletic Foundation would like to acknowledge **Istvan Balyi & Richard Way**, the architects of “*Canadian Sport for Life*” & *Long Term Athlete Development Strategy* ([www.canadiansportforlife.ca](http://www.canadiansportforlife.ca)), from which the underlying sports philosophies and diagrams of this document are based. We also relied on its supplements, *Developing Physical Literacy* and *No Accidental Champions*. These internationally recognized best practices will be used as the base of information for the creation of Utah Sport for Life.

An advisory board has been assembled and will assist in both the development and implementation steps of the Utah Sport for Life model. The board includes representatives from state and local government, health departments, school systems, parks and recreation, and sport national governing bodies.

## Contact Us

Please direct all questions and further coordination efforts to:

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**NOTES**

[www.UtahSportForLife.com](http://www.UtahSportForLife.com)

