



Water Polo Canada



What Is LTAD?

Long-term athlete development (LTAD) is an athlete progression model from playground to podium. LTAD was developed by a group of Canadian sport scientists, and was adopted by Sport Canada in 2005. All recognized Olympic sports, water polo for example, was asked to create its own unique LTAD model based on the Canadian Sport for Life Document- the generic LTAD. LTAD is based on scientific research and the art of the coach. LTAD differentiates between chronological age and developmental age. LTAD highlights specific windows of opportunity to optimally train an athlete's skill, strength, stamina, speed, and suppleness (flexibility). LTAD explains concepts of physical literacy (0-12 years old) and the importance of late specialization for water polo, and position specific training. LTAD also highlights the importance of proper planning and periodization given the developmental age, and level of competitiveness of the athlete. LTAD incorporates the mental, emotional, and cognitive development characteristics of an athlete and the implications for their coaches. Finally, LTAD promotes and aligns sport systems at all levels- community, elementary and secondary schools, clubs, university level, and high performance levels (National and Provincial Teams)- by segmenting the level of competition into 3 categories- Active for Life, Competition, and Excellence.

Figure 1- Pyramid of Segregated Levels of Competition

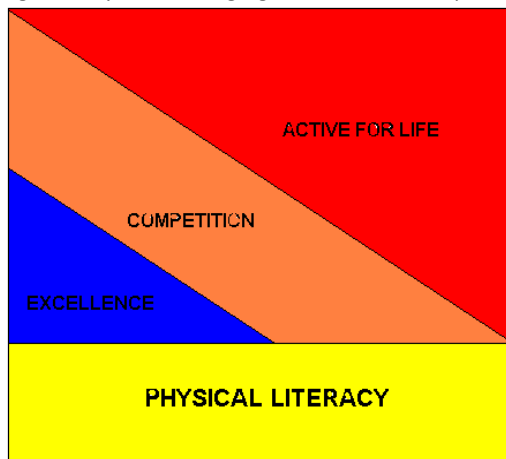


Figure 2- System Alignment



What Is Physical Literacy (PL)?

PL is the combination of developing fundamental movement and fundamental sport skills. Fundamental movement skills are important movements that form the base for all other sports. For example, how many sports involve running, throwing, and catching? For this reason, those skills are fundamental movement skills and must be developed prior to the age of 12, and before athletes learn their fundamental sports skills- treading water, head up front crawl, ball skills, etc. PL refers to competency in movement and sports skills. Fundamental movements and sport skills should be developed through fun and games, and before the onset of adolescent growth. PL also includes the ability to “read” what is going on around them in an activity setting and react appropriately to those events. The myth that it



Water Polo Canada



“just happens”, that children do develop good physical skills on their own by trail-and-error is not true; there are many who do not, and for those the consequences can be severe. It is important to understand that all adult parties surrounding the child take part in developing the child’s basic movement skills. Water polo programs targeted at this age group should focus on cross-training and not solely water polo specific training. Finally, it has been proven that being physically active later in life depends on feeling confident in an activity setting- and that confidence as an adult- comes from having learned fundamental movement skills and fundamental sport skills.

Figure 3- Fundamental Movement Skills



Figure 4- List of Fundamental Movement Skills

Travelling Skills	Object Control Skills	Balance Movement
<ul style="list-style-type: none"> • Boosting • Climbing • Eggbeater • Galloping • Gliding • Hopping • Ice Picking • Jumping • Leaping • Poling • Running • Sculling • Skating • Skipping • Sliding • Swimming • Swinging • Wheeling 	<p>Sending:</p> <ul style="list-style-type: none"> • Kicking • Punting • Rolling (ball) • Strike (ball, puck, ring) • Throwing <p>Receiving:</p> <ul style="list-style-type: none"> • Catching • Stopping • Trapping <p>Travelling with:</p> <ul style="list-style-type: none"> • Dribbling (feet) • Dribbling (hands) • Dribbling (stick) <p>Receiving and Sending:</p> <ul style="list-style-type: none"> • Striking (bat) • Striking (stick) • Volleying 	<ul style="list-style-type: none"> • Balancing/Centering • Body Rolling • Dodging • Eggbeater • Floating • Landing • Ready position • Sinking/Falling • Spinning • Stopping • Stretching/Curling • Swinging • Twisting/Turning

What Are The Water Polo Stages of LTAD?

	Men	Women	Level of Competition	Coaching Requirements	Referee Requirements	Philosophy	Primary Objective	Guiding Principle
Active Start	0-6	0-6	N/A	N/A	N/A	Getting Wet	Learn fundamental movements and link them together in play	Create a love for water activities
I Love Water Polo FUNdamentals	6-9	6-8	Physical Literacy	Community Sport-Initiation	Community Sport-Initiation	Fun	Learn all fundamental movement skills and build overall motor skills	Fun, safety, and active participation are of primary importance
I Love Water Polo Technical Foundations	9-12	8-11	Physical Literacy	Community Sport-Initiation	Community Sport-Initiation	Lay the Foundations	Learn overall sport skills	Athletes must be actively engaged in the activity; motor and cognitive wise



Water Polo Canada



Competitive Foundations	12-16	11-15	Active for Life	“The Practice Coach”	Regional	Build the Competitive Base	Build an aerobic base, develop speed and strength, and further develop and consolidate sport skills	Intensity must be gradually raised to reach competition requirements
			Competition Excellence	“The Game Coach”	Provincial			
Training to Compete	16-19 +/-	15-18 +/-	Active for Life	“The Season Coach”	Provincial	Competition	Optimize the engine and learn to compete	Training intensity must always be high to optimal. Sub-maximal intensity will alter the motor coordination of the athlete
			Competition Excellence		National C National B			
Training to Perform	19-25 +/-	18-23 +/-	Competition	“The Season Coach”	National C National B	RTE (Road to Excellence)	Own the podium	Modelling all possible aspects training and performance
			Excellence	“The Quadrennial Coach”	National A UANA FINA- Retired			
Living to Win	25+ (20+)	23+ (20+)	Excellence	“The Quadrennial Coach”	National A UANA FINA FINA- Retired	Excellence	Gold medal performances	Modelling all possible aspects training and performance
Active for Life	Enter at any age	Enter at any age	Active for Life	Community Sport-Initiation “The Practice Coach”	Community Sport-Initiation Regional Provincial	Polo for Life	A smooth transition from an athlete’s competitive career to lifelong physical activity and participation in water polo	Create water polo activities for all ages- player, coach, official, administrator, and volunteer

LTAD is based on the premise of continuous improvement. WPC will be continually using the Canadian water polo community’s feedback to ensure its LTAD model benefits all stakeholders; Active for Life, Competitive, and Excellence athletes, coaches, officials, parents, PSOs, clubs, and communities. LTAD is



Water Polo Canada



a road map to long-term sustainability for water polo in Canada, and not only a player pathway model. LTAD identifies an organization's shortcomings, and attempts to rectify the inefficiencies.

WPC is currently performing a review of its LTAD model by a panel of water polo experts, which includes PSOs, NT coaches, club coaches, and other experienced water polo personnel. The next step in the LTAD process is creating specific implementation plans within each geographic region where water polo currently exists. The third step, which is very much related to the implementation process, is to undergo a competition review in order to align all systems of play- community, academic, club, and international- and break down the old ad-hoc system of competition. The competition structure is extremely important to the entire process of LTAD and its implementation. Many resource materials have already been posted on the WPC web site in the Long-Term Athlete Development section. Included is the summary framework matrix, examples of periodization, the Canadian Sport for Life document, Developing Physical Literacy, parent guides, and much more. For those of you who missed the 2008 Growth & Leadership Summit, we are pleased to offer you the PDF version of the Andrea Wooles' (LTAD expert) power point presentation. Please take the time to download these documents to learn more about the entire LTAD process.

For more information and resources please visit www.ltad.ca