Long-term Athlete Development (LTAD) model

- International Competitions: Active for Life • Train to Win
- National Championships: Active for Life • Learn to Win • Train to Compete
- Provincial Competitions: Active for Life • Train to Train • Learn to Train
- Club Setting: Active for Life • Learn to Train • FUNdamentals
Fundamentals – Active Start – Level 1 Coach

Weightlifting is a late specialization sport, so we must depend on parents, other sports and physical education to prepare young children to be physically literate when reaching the age to begin our sport. Throughout the Physical Literacy stage, children should be learning fundamental movements and linking them together into play.

Objectives
Active play is the way young children develop fundamental movement skills and experience their bodies. Children with disabilities may need extra encouragement to get involved in active play so they can develop their movement skills and acquire habits of lifelong activity.

Activities and games should provide fun and encourage participation, with emphasis on the development of fundamental movement skills and the ABCs. Physical activity should be fun and a part of the child’s daily life, not something required. As an essential part of healthy child development, physical activity accomplishes the following:

- Enhances development of brain function, coordination, social skills, gross motor skills, emotions, leadership, and imagination.
- Helps children to build confidence and positive self-esteem.
- Helps to build strong bones and muscles, improves flexibility, develops good posture and balance, improves fitness, reduces stress,
- Promotes healthy weight.
- Helps children learn to move skillfully and enjoy being active.

Total activity hours
- Provide 30-60 minutes a day of structured physical activity.
- Provide at least 60 minutes and up to several hours of unstructured physical activity and play each day
- Children this age should not be sedentary for more than 60 minutes a day (unless sleeping).
- Children should be engaged in play for a length of time suitable to their age and amount of other physical activities

Where
- Home, playground, daycare, preschool and kindergarten.

Who
- Level 1 Club Coaches, Parents and teachers
Learn to Train – Level 1 Club Coach

Learn consistency of good motor patterns.
Acquisition of basic technique and skills that are easily manageable with load progressions

1. Technical Preparation: Teaching process from simple to more complex exercises, reinforcing technique
2. Psychological Preparation: Motivation, discipline and proper conduct, fair play, concentration, relaxation
3. Tactical Preparation: Proper warm-up before test or competition, execution of the predetermined attempts
4. Competition Objective: Continuous improvement of the results

Technical objectives
• Focus on the development of basic Olympic Weightlifting techniques (classical lifts – Snatch, Clean and Jerk).
• Have athletes handle weights where they can realize success.
• Teaching should progress from simple to more complex exercises.
• Reinforce correct technique.
• Provide some challenge to the athlete but do not increase volume and intensity too quickly

Tactical objectives
• Proper warm-up before training or competition.
• Execution of predetermined attempts

Physical objectives
• Work on improving flexibility, coordination and stability (good positioning and body posture).
• Stick with the basic technical skills while working on general strength and conditioning (overall physical literacy).
• Overall physical development: aerobic/anaerobic systems, strength, power, speed, agility, flexibility, and muscular coordination.

Psychological objectives
• Begin to develop athlete motivation, dedication, commitment and discipline in training and competition.
• Teach fair play and proper conduct with coaches, officials, and other athletes.
• Introduce basic concentration and relaxation exercises.
• Develop concentration (focus) and willpower to complete training tasks.
• Make all aspects of training and competition positive for the athlete.

Competition objectives
• Introduce competition to the athlete.
• Competition can also assist coaches with identifying talent.
• Look at the possibility of developing a point system for club competitions where athletes are judged on their technique (technique before load) as well as result.
• Aim for continuous improvement of results.
• 4 – 6 competitions.

Other sports
• Encourage athletes to participate in a wide range of sports.
• Athletes should continue to learn overall sports skills in a variety of sport environments.
• Develop speed, power, and endurance using games.

Training Volume
• Recommended 100–200 training hours per year.

Where
• Clubs, schools, Local Sports Partnerships and local community

Who
• Level 1 Club coaches.
• Competition Introduction – Club Coach Certification.
Train to Train – *Level 1 / Level 2 Coach*

This is a critical stage for young athletes as they must refine their technique. Aspiring weightlifters should begin to specialize at this stage, as an increase in the volume of the competition lifts is required to achieve

**Technical objectives**
- Stress the acquisition of good technique for future specialization.
- Refinement of skills considering changes in body proportions as a result of maturation.
- Develop the perception of correct technical performance.
- Technical preparation: Achieve technique perfection; continuously refine the lifts focusing on proper posture, speed of movement, and reception (receiving weight in the bottom position).
- Exercises for General and Specific training.
- Gradually increase the amount of technical exercises pertaining to Olympic Weightlifting.

**Tactical objectives**
- Practical application of strictly planned attempts.

**Physical objectives**
- Overall physical development: Strength of the main muscle groups, speed in conjunction with strength, specific flexibility, strength endurance, specific coordination.
- Develop working capacity through general and multilateral physical preparation.
- Improve Flexibility, coordination, and aerobic endurance, building the basis of Speed and Strength development.
- Exercises to improve Flexibility and coordination
- Exercises to develop aerobic endurance specific to Olympic Weightlifting.
- Growth and development must be carefully monitored.

**Psychological objectives**
- Improve focus (emotional and mental preparedness).
- Structured short- and long-term training programs.
- Develop narrow and intense concentration, visualization, muscular relaxation.

**Competition objectives**
- Participate in selected competitions according to individual levels of performance.
- Increase sport results during the competition season.
- Peak for main event.
- 6 – 8 competitions.

**Other sports**
- Encourage athletes to participate in 1-2 other sports for the benefits of cross-training, fitness, and enjoyment.

**Training Volume**
- Recommended increase volume of training hours to 200–400 hours per year.

**Where**
- Clubs, schools and community recreation programs.

**Who**
- Level 1 Club coaches,
- Competition Introduction – Club Coach Certification.
Train to Compete - Level 2 / Level 3 Coach

This is the most important phase of training for Junior / U 23s Weightlifters who are aiming for high-performance competition. Athletes must develop their work capacity to sustain the high frequency of training required in this stage (daily, and possibly twice daily). More competitions should be added to the competition schedule, particularly national and international competitions, to develop the psychology to perform in pressure situations.

Technical Objectives
- Perfect technique through continuous refinement of skills.
- Continuously refine the lifts focusing on the proper posture, speed of movement.
- Improve motor abilities which are dominant within the sport.
- Perfect technique of the Competitive lifts (Snatch and Clean & Jerk).

Tactical objectives
- Practical application of strictly planned attempts.

Physical objectives
- Harmonious development of the whole body with great emphasis being placed on areas which will ensure a high level of efficiency.
- Accelerated development of strength.
- Strength of the main muscle groups and strength endurance.
- Speed in conjunction with strength.
- Specific flexibility and specific coordination.
- Increase both volume and intensity in training while avoiding overtraining.

Psychological objectives
- Develop narrow and intense concentration, visualization, muscular relaxation.
- Develop psychological abilities of the athletes to better prepare them for stressful training and intense competitions.

Competition objectives
- Increase sport result during the competition season.
- Peak for main event.
- Develop long-term plans for individual success.
- 6 – 8 competitions.

Other sports
- Athletes have specialized in Olympic Weightlifting. Training Volume
  - Recommended increase volume of training hours to 400–600 hours per year.

Where
- Clubs and Provincial programs.

Who
- Club and Level 2 coaches / Provincial coaches.
- Competition Development certification.
Learn to Win – Level 3 Coach

At this advanced stage, the training and competition environments must be elite caliber. Athletes should be training around other elite weightlifters, and there should be regularly scheduled training camps and regular competition at major events. Specialized athlete support becomes essential to optimizing performance, including sport scientists, nutritionists, massage therapists, physiotherapists and other professionals.

Technical objectives
- Develop individual style.
- Continued refinement and stabilization of skills.

Tactical objectives
- Prepare to perform pre-planned strategies and attempts.

Physical objectives
- Continue to maximize strength of the main muscle groups, speed in conjunction with strength, power endurance, and neuromuscular coordination.

Psychological objectives
- Perform in highly competitive situations under pressure.

Competition objectives
- Maximize competition results.
- Peak for main events.
- Break competition records (Provincial, National, and International).
- 4 – 6 competitions (2-3 International events).

Other sports
- Athletes have specialized in Olympic Weightlifting.

Training Volume
- Progressively increase volume of training hours to 600–800 hours per year.

Where
- Provincial and National Training Programs.

Who
- Level 2 Coaches and Provincial coaches and High Performance/National coaches.
- Competition Development certification and Competition High Performance certification.
**Train to Win – Level 4 Coach**

All of the athlete’s physical, technical, tactical (including decision-making skills), mental, personal and lifestyle capacities are fully established with the focus of training shifting to maximizing performance. Athletes become ambassadors of the sport and role models for other weightlifting athletes.

**Technical objectives**
- Develop individual style.
- Refinement and mastery of technical skills through continuous work.

**Tactical objectives**
- Prepare to perform pre-planned strategies and attempts.
- Athletes along with their Coaches should have a PET (Performance Enhancement Team) in place to assist with preparation and recovery.

**Physical objectives**
- Continue to maximize strength of the main muscle groups, speed in conjunction with strength, power endurance, and neuromuscular coordination.
- Efficient preparatory and recovery work.
- Train athletes to peak for major competitions.
- Ensure rest and recovery.

**Psychological objectives**
- Mental and life skills should be at the highest level to be able to cope with all stresses in and out of competition and training.
- Ensure a healthy lifestyle and ethical participation.

**Competition objectives**
- Maximize competition results.
- Peak for main events.
- Break competition records (Provincial, National, and International).
- Podium performances.
- 3 – 5 competitions (1 - 2 International events).

**Other sports**
- Athletes have specialized in Olympic Weightlifting.
- Highest degree of specialization at this stage.

**Training Volume**
- Progressively increase volume of training hours to 800–1000 hours per year.
- Athletes are committed to excellence and their training program reflects this.

**Where**
- National Training Programs.

**Who**
- High Performance/National coaches.
- Competition High Performance certification.
Lift for Life – Level 1 Coach

Lift for Life includes participants of any age who enjoy Olympic Weightlifting in a non-competitive setting, or recreational lifters who enjoy competing for fun. It also includes athletes competing in Masters events at the Provincial, national or international level. It is key that weightlifting athletes have a positive experience in the sport, so they can transition to other roles after they leave the competitive stream (coach, official, volunteer, or sport leader).

Technical, Tactical and Physical objectives
- Maintain physical abilities and skills while having fun.

Psychological objectives
- Lifelong enjoyment of Olympic Weightlifting.
- Respect for themselves, others and the sport of Olympic Weightlifting

Competition objectives
- Move from high-performance competition to lifelong competitive sport through age group competition such as Master’s European and World Championships/Games.
- 2 – 3 competitions.

Other sports
- Active participation in Olympic Weightlifting and other sports.

Training Volume
- According to the goals and interests of the individual.

Where
- Clubs and community recreation programs.

Who
- Level 1 Club coaches and community recreation instructors.