Coaching Special Olympics Athletes
Unit 1: The Athlete—Different Abilities and Challenges

Coaching Special Olympics Athletes begins with the athlete and continues to focus on the athlete throughout the course.

This section outlines how the psychological, physical, and social conditions of the Special Olympics athlete influence his participation in sport. Coaches need to be aware of these aspects to understand their athletes better and to design appropriate training programs that meet each athlete's needs. The emphasis is on what the athletes can do so that the coach can assist them in building on their strengths.

1. Psychological considerations related to learning

There are four psychological considerations related to an athlete's ability to learn.

- For challenges in **motivation,** *the goal is helping athletes maintain interest.*
  - Attention span—keep drills short (8- to 10-minute guideline).
  - Short-term goals are more helpful because they are immediate.
  - Immediately provide positive reinforcement when desired behavior is demonstrated so that the athlete repeats it.

- For challenges in **perception,** *the goal is helping athletes process information about the sport.*
  - If there are impairments in sight or hearing, provide a cue or an accommodation to what abilities they do have. For example, if the athlete is visually challenged when playing bocce, ring a bell over the pallina.
  - If an athlete has difficulty focusing attention because there is too much sensory stimulation, move the athlete to a quiet area or corner of the gymnasium where focus is heightened.

- For challenges in **comprehension,** *the goal is helping athletes understand the sport in which they are participating and perform requisite skills.*
  - Apply the appropriate level of instruction.
  - Use one- or two-part instructions when an athlete has difficulty understanding multipart actions.
  - Realize that frequent repetition and reinforcement over time will affect the person's learning curve.
  - Since some athletes have difficulty generalizing skills, provide a progression of opportunities so that they can use the skills in appropriate situations.

- For challenges with **memory,** *the goal is helping athletes remember and perform skills at the appropriate time.*
  - Repeat previously learned skills frequently.
  - Provide a progression of situations in which the skills are applied.

- Provide competition opportunities so that the athlete can apply skills appropriately.

2. Medical considerations

Down syndrome

- It's a chromosomal abnormality.
- Persons with Down syndrome (DS) have 47 chromosomes rather than 46, causing abnormal fetal growth; this results in fewer body and brain cells than in persons without Down syndrome.
- There is not a typical person with Down syndrome. Persons with DS vary enormously in
  - personality
  - appearance
  - ability
  - intellectual functioning

Result: It is difficult to predict what coaching an athlete with DS will be like without knowing the athlete in person.

Behavioral awareness:
Many athletes with Down syndrome
- can communicate perfectly well using the spoken word,
- may be extremely mature socially,
- may have difficulty expressing themselves,
- learn through mimicry, and
- can be extremely stubborn.

Medical considerations include tendencies toward
- short stature,
- poor muscle tone,
- hypermobility of the joints (loose-jointedness),
- mild to moderate obesity,
- underdeveloped respiratory and cardiovascular systems,
- short legs and arms in relation to torso,
- broad hands and feet with stubby fingers and toes,
- poor equilibrium (balance), and
- perceptual difficulty (difficulty focusing attention on appropriate object or task).

Children with DS are at increased risk for
- certain breathing problems
- digestive problems
- childhood leukemia
- hearing loss
- infections
- vision disorders
- type 1 diabetes
- Alzheimer's

Atlanto-axial Instability
- Atlanto-axial instability is an orthopedic condition found in approximately 12% to 22% of individuals with Down syndrome.

- There is a misalignment of the first and second cervical vertebrae that could cause permanent damage to the spinal cord during hyperflexion or hyperextension of the head and neck.
- Contraindicated activities and prohibited sports or events include
  - butterfly stroke in aquatics
  - football (soccer)
  - alpine skiing
  - artistic gymnastics
  - pentathlon
  - equestrian sports
  - diving and diving starts

Obstacles to gross motor development of an individual with Down syndrome

Physical problems and characteristics:

- Hypotonia: low muscle tone (floppiness)
- Increased flexibility in joints (ligaments that hold the bones together have more slack than usual)
  Note: As child gets older and gains strength in the arms, the shoulder joint becomes more stable.
- Decreased muscular strength
  Note: Strength can be greatly improved through repetition and practice.
- Short arms and legs relative to the length of the trunk

Temperament (defined as a person's characteristic manner of thinking, behaving, and reacting)

a. *"Movers":*
Love to move from place to place and spend limited time in one position
Tolerate new positions and movements and take risks
Enjoy very brief periods of "rest" and then prefer to be moving
Love to move fast
Like motor skills involving gymnastics-type activity
Initially resist stationary types of activities involving standing, waiting, and so on

b. "*Observers":*
Like to stay in one place and are content to watch, socialize; need a reason to move (motivation)
Are cautious and careful and tend to avoid new movements or positions
Prefer to be involved in slower-moving activities so they can feel balanced and in control
Initially resist fast-moving activity or moving in and out of postures or positions needed to improve sport and athletic skills

Autism spectrum disorders

Definition: A developmental disability significantly affecting verbal and nonverbal communication and social interactions that may adversely affect the coachability of the athlete:

- Engagement in repetitive activity
- Resistance to environmental change or change in routine
- Unusual responses to sensory experiences

- May exhibit self-stimulatory behaviors (coach needs to become aware; control; may need to block this behavior)
- May exhibit obsessive–compulsive behaviors (coach needs to become aware; control or block; set up behavior support plan)

Orthopedic impairments

Definition: A group of permanent disabling symptoms resulting from damage to the motor control areas of the brain. Examples include, but are not limited to, the following:

- Abnormal reflex development
- Difficulty in coordinating and integrating basic movement patterns
- Intellectual disability
- Seizures
- Speech and language disorders
- Sensory impairments (visual motor control)

Attention deficit hyperactivity disorder (ADHD)

Definition: A condition characterized by hyperactive behaviors, difficulty attending to a task at hand, and a tendency to be impulsive. It is also a discrepancy between academic potential and achievement that is not caused by intellectual disability, emotional disturbance, or environmental disadvantage.

Characteristics:

- Inattention
- Poor listening skills
- Restlessness
- Impulsiveness and lack of self-control
- Hyperactivity
- Onset before age 7
- Excessive motor activity
- Distractibility
- Difficulty attending to and following directions
- Difficulty focusing and concentrating
- Inconsistent performance in learning
- Disorganization
- Inconsistent work habits
- Difficulty working independently
- High activity level, constant motion, fidgeting, squirming, restlessness
- Impatience
- Intrusiveness or pushiness
- Risk-taking behavior leading to a high incidence of injury
- Difficulty with transitions
- Aggressive behavior
- Social immaturity
- Low self-esteem and high frustration

Social and emotional considerations associated with ADHD:

- Inappropriate responses to new or challenging social or emotional situations that the person may not be prepared to handle
- Difficulty in selecting appropriate responses
- Inadequate pragmatic social skills
- May have limited social opportunities—athletics, clubs, exposure to extended family activities
- May lack financial resources for access or participation
- May lack transportation
- May avoid participation
- May be verbally disruptive
- May seek constant reassurance
- May exhibit tantrums

Intellectual disability

Definition by the American Association on Intellectual and Developmental Disabilities (AAIDD):

Intellectual disability is characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical skills. This disability originates before age 18.

Assumptions: Assumptions are an explicit part of the definition because they clarify the context from which the definition arises and indicate how the definition must be applied. Thus, the definition of intellectual disability cannot stand alone. The following five assumptions are essential to the application of the definition of intellectual disability:

1. Limitations in present functioning must be considered within the context of community environments typical of the individual's age peers and culture.

2. Valid assessment considers cultural and linguistic diversity as well as differences in communication, sensory, motor, and behavioral factors.

3. Within an individual, limitations often coexist with strengths.

4. An important purpose of describing limitations is to develop a profile of needed supports.

5. With appropriate personalized supports over a sustained period, the life functioning of the person with intellectual disability generally will improve.

   Relation of 2010 definition of intellectual disability to 2002 definition of mental retardation. The term intellectual disability covers the same population of individuals who were diagnosed previously with mental retardation in number, kind, level, type, and duration of the disability, and the need of people with this disability for individualized services and supports. Furthermore, every individual who is or was eligible for a diagnosis of mental retardation is eligible for a diagnosis of intellectual disability.

Characteristics of intellectual disability:

1. Cognitive learning:

- Area in which persons differ most
- Learn at a slower rate
- Achieve less academically

2. Social, emotional, physical:
   - Frequently exhibit inappropriate responses to social or emotional situations
   - Do not fully comprehend what is expected of them in social situations
   - Have delayed development of motor skills
   - May be overweight because of low activity level

3. Characteristics affecting athlete performance in training and competition:
   - Confidence level (low)
   - Communication barriers (overload)
   - Performance expectation (unrealistic)
   - View each learning experience as a new one
   - Game strategies: lack appropriate ones to handle information and situations
   - Response-produced feedback (lack knowledge of when and how to use)
   - Attentive to too many cues (selective)
   - Expend too much unnecessary energy
   - Worry too much about too many things

4. Observation of athlete's behavior during training or competition:

   Coaches observe specific athlete behaviors in order to determine coaching strategies *and structure needed to deal with behaviors that may inhibit the athlete's participation or the participation of other athletes in the training or competitive environment:*

   a. Environmental entrance (behavior of the athlete when she comes to the training site or competition venue): Is the athlete in control?

   b. Environmental exit (behavior of the athlete as he leaves the training or competition site): Is the athlete in control (calm, relaxed)?

   c. Active participation: Is the athlete in control, attentive, focused on the task, persistent in completing the task? Does the athlete handle feedback without incident?

   d. Nonactive behavior (behavior that emerges as the athlete waits for a turn or needs to watch a demonstration): Is the athlete in control and able to inhibit impulsive behavior?

   e. Competitive attitude: A negative mental position or feeling an athlete has regarding an activity; athlete views the situation as a "contest" between individual athletes or among a team of athletes.

   f. Positive participation feedback: While engaged in a task or immediately following completion of a task the athlete exhibits positive feedback, for example, smiling, expression of joy, laughter, cheering, high-fiving.

g. Negative participation feedback: While engaged in a task or immediately following completion of a task the athlete exhibits negative feedback, for example, cries, screams, swears, tantrums, runs away, strikes out at someone (e.g., a coach, official, another athlete, spectator).

h. Reinforced participation: Athlete performs satisfactorily when continually reinforced by the coach, another athlete, or parent, for example, but performance is significantly affected negatively when reinforcement is not given.

i. Intrinsic participation: The athlete performs tasks without reinforcement and appears to be self-motivated to perform.

j. Social interaction with peers: Is either positive or negative.

k. Social interaction with coach: Is either positive or negative.

Medications

- Side effects of various medications
- Knowing what medications athletes are taking

Seizures

- Seizure incidence
- Recommended procedures for coaches

Physical disabilities

- Physical strength, coordination, and muscle tone
- Special training considerations
- Special Olympics–approved modifications

Fetal alcohol syndrome (FAS) and fetal alcohol effect (FAE)

- Birth defect caused by prenatal alcohol exposure
- Person consistently functions better on concrete performance tasks
- Tends to have poor verbal comprehension skills and attention and memory deficits

3. Social considerations

Typical social skills

- May lack social or adaptive skills due to lack of opportunity

Physical recreation at home

- May be very inactive in the home
- May not have been exposed to any type of recreation

Economic status

- May lack financial means
- May be unable to access independent transportation