Special Olympics

Alpine Skiing

Coaching Guide 2021

Acknowledgements

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They have helped fulfill the mission of Special Olympics: to provide year-round sports training and athletic competition in a variety of Olympic-type sports for people 8 years of age and older with intellectual disabilities, giving them continuing opportunities to develop physical fitness, demonstrate courage, experience joy and participate in a sharing of gifts, skills and friendship with their families, other Special Olympics athletes and the community.

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Special Olympics welcomes your ideas and comments for future revisions of this guide. We apologize if, for any reason, an acknowledgement has been inadvertently omitted.

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The Basics of Alpine Skiing

Essential Components of Planning an Alpine Skiing Training Session

Each training session needs to contain the same essential elements. The amount of time spent on each element will depend on the goal of the training session, the time of season the session is in and the amount of time available for a particular session. The following elements need to be included in an athlete's daily training program. Please refer to the noted sections in each area for more in-depth information and guidance on these topics.

- Warm-ups
- Previously taught skills
- New skills
- Competition experience
- Cool-downs
- Feedback on performance

The final step in planning a training session is designing what the athlete is actually going to do. Remember when creating a training session using these key components, the progression through the session allows for a gradual buildup of physical activity.

- Easy to difficult
- Slow to fast
- Known to unknown
- General to specific
- Start to finish

Principles of Effective Training Sessions

Initiative	Outcome
Keep all athletes active	Athlete needs to be an active participant
Create clear, concise goals	Learning improves when athletes are aware of what is expected of them
Give clear, concise instructions	Demonstrate – increase accuracy of instruction
Record progress	You and your athletes chart progress together
Give positive feedback	Emphasize and reward things the athlete is doing well
Provide variety	Vary exercises – prevent boredom
Encourage enjoyment	Training and competition is fun – help keep it this way for you and your athletes
Create progressions	Learning is increased when information progresses from: Known to unknown – discovering new things successfully Simple to complex – seeing that "I" can do it General to specific – this is why I am working so hard
Plan maximum use of resources	Ensure that athletes have equipment that is appropriate for their ability level and up to current safety standards
Allow for individual differences	Different athletes, different learning rates, different capacities

Tips for Conducting Successful Training Sessions

- Assign assistant coaches their roles and responsibilities in accordance to your training plan.
- When possible, have training stations prepared before the athletes arrive.
- Introduce and acknowledge coaches and athletes.
- Review intended program with everyone. Keep athletes informed of changes in schedule or activities.
- Have a weather contingency plan.
- Keep drills and activities brief so athletes do not get bored. Keep everyone busy with an exercise, even if it is rest.
- Make sure you keep fun as an element of your training session.
- Summarize the session and announce arrangements for next session.

Tips for Conducting Safe Training Sessions

Though the risks can be few, coaches have a responsibility to ensure that athletes know, understand and appreciate the risks of Alpine skiing. The safety and well-being of athletes are the coaches' primary concerns. Accidents may occur if coaches forget to take safety precautions. It is each coach's responsibility to minimize the occurrence of injuries by providing safe conditions for training and competition. Athletes must be made aware of the risks associated with Alpine skiing.

- Establish clear rules for behavior at the first training session, and enforce them:
- Listen to the coach.
- Ask the coach before you leave the training session.
- Establish appropriate communication with training venue, including ski patrol.
- Warm up and stretch properly at the beginning and end of each training session.
- Make sure athletes have access to water to drink.
- Make sure medical services are available.
- Train all athletes and coaches on emergency procedures.
- Make sure certified technicians are available to make adjustments to equipment.
- Choose a safe area. Do not practice in areas that are not properly prepared for training.
- Practice on slopes that are appropriate to the skill level of your athletes.
- Train to improve the general fitness level of your skiers. Physically fit skiers are less likely to get injured. Make sure your training sessions are active.

Alpine Skiing Attire

When it comes to clothing, function comes first. Functional clothing protects the athlete in different types of weather. Here you should pay attention to quality.

The two most important principles of dressing for skiing are to:

1. Maintain body heat
2. Keep dry

Clothing and accessories should be combined to provide warmth and protection from moisture, wind, cold and sun.

The structure of the layers of clothing is also important. For outerwear, jackets and ski pants that have a high level of waterproofness are recommended - e.g. GoreTex, Sympatex, etc.

Pay attention to the care instructions! Incorrect maintenance can reduce functionality.

Under Layers

Long Underwear

Skier preference will decided what type of long underwear to choose. Some skiers prefer synthetic fibres while others prefer materials made from natural fibres, e.g. merino wool.

Socks

Ski socks should be worn.
The thin sock allows for air circulation inside the boot to keep the feet warm and dry.

Turtleneck Shirt

A turtleneck shirt is the most practical ski shirt because it is snug at the neck and wrist, which is good for maintaining body heat. A turtleneck can also be used to cover the lower face on cold days.

Sweaters

Appropriate winter clothing in layers will provide warmth and options if the weather changes. Fabric that allows moisture to wick away from the body is recommended (not cotton).

Outer Layers

Ski Pants

Stretch ski pants worn over long underwear provide warmth and give support to the legs. The pants should be snug, yet allow for a full range of motion in the legs.
If stretch ski pants are not available, consider warm-up or wind pants over long underwear.

Insulated ski pants provide additional warmth and protection on cold days.
Bib-overall ski pants provide extra warmth and are great for keeping athletes dry.

Jackets

Jackets protect the torso from wind, moisture and heat loss.
A hip-length jacket is most practical for comfort and skiing movements, and a hood provides further protection in cold, windy or wet conditions.

Gloves

Gloves that are specifically designed for Alpine skiing are essential. Ski gloves should be waterproof.
The hands can get cold very quickly and having cold hands can make skiing more difficult.

Helmets

According to regulations, helmets must have an FIS certificate. The FIS logo should be visible on the helmet. A chin bar is also important for Slalom Skiers.

A helmet appropriate for Alpine ski racing shall be required on all athletes and coaches in official training and competition for all ability levels.
Helmet selection should be made with the help of a knowledgeable Alpine coach or ski shop employee. Ski helmets are safety equipment and must fit properly to protect an athlete from head injury.
No ski hats should be worn under the helmet in cold weather.

Goggles

Goggles protect the eyes from the glare of the sun reflected off of the snow and should be worn at all times. Ensure the goggles fit the athlete with their helmet on so they do not slip or move during activity.
Goggles also block the wind and improve visibility when it is snowing.
Goggles should be worn when athletes are training or competing in gates, because they provide proper eye protection. Polarized goggle lenses offer the best eye protection.
For athletes that wear glasses, there are special ski goggles that make it possible and easier to wear the glasses under the ski goggles.

Accessories

Vest

During cold weather a vest can supply an extra layer, and during mild weather it may replace a ski jacket.

Ski Mask/ Neck Warmer

A ski mask/ neck warmer can help keep chin, nose and cheeks dry and warm. On extremely cold days a face mask or neck warmer up to the goggles must be worn to prevent frostbite.

Sunscreen

Sunscreen helps prevent windburn and sunburn as it blocks out harmful rays either directly from the sun or reflected from the snow.

Rain Gear

Rain gear may be necessary if the athlete lives in an area where rain during the winter is common. A hooded rain jacket and pants may make a difference in comfort while keeping the athlete dry.

Alpine Skiing Equipment

Alpine skiing requires the type of sporting equipment listed. It is important for athletes to be able to recognize and understand how equipment for the specific events works and impacts their performance.

Coach Task: Have your athletes name each piece of equipment as you show it and give the use for each. To reinforce this ability within them, have them select the equipment used for their events as well.

Ski Boots

- The ski boots are an important factor for every skier.
- Ski boots that hurt can spoil the ski experience, cause injury and prohibit success in the sport. Modern ski boots require one pair of thin ski socks. It is strongly recommended to have ski boots fitted by a qualified boot fitter. It will increase the athlete's performance and enjoyment of the sport and help prevent injuries.
- The boot should fit compactly. The toes should be easy to move and the heel shouldn't slide up.
- When helping the athletes put their boots on at the hill, pull out the tongue of the boot to prevent having to jam the foot into the boot.

Alpine Skis

- The ski length will vary with the ability and size of the athlete. If the athlete is weaker, has poor motor skills and/or is a beginner, a slightly shorter ski is recommended. It is recommended to go to a specialist retailer.
- There are different ski models for the different disciplines, which differ in length and structure. This must be taken into account when buying e.g. Slalom and Giant Slalom.
- Every ski has four characteristics that determine how it will perform for different people with different needs:

1. **Length** affects the stability of the ski and its ability to turn. A longer ski will be more stable at higher speeds, while a shorter ski turns more easily.
2. **Camber** is the bend or "bow" in the ski when the two bases are put together. The function of camber is to distribute the weight of the skier along the entire running surface of the ski.

3. Sidecut is the dimension of a ski whereby the width of the tip and tail is wider than the middle of the ski.
4. Flex is the springy resistance of the ski on snow. A stiff ski is more difficult to flex than a soft ski. Heavier and stronger skiers need stiffer skis than lighter skiers.

NOTE: In selecting skis, it is important to get advice from experts. One pair of skis is NOT suitable for all types of skiing and racing.

Bindings

Bindings hold the ski boots to the skis and allow a skier to come out or off of the skis if in trouble. Binding adjustments should be set by a qualified technician. The settings are determined by the athlete's weight, ability level and type of ski. Always have the binding settings checked at the beginning of each season and throughout the season.

Poles

The most important consideration for poles is their length. They must be the proper length for each skier. For proper sizing, turn the pole over so that the tip is facing up. Grab the pole under the basket. With the elbow bent, the skier's arm should be parallel to the ground. Poles may be important for timing and balance.

Put on Equipment

- Athlete learns to put on equipment: clothing, accessories, helmet, boots, skis and sometimes poles (depending on the athlete).
- Coach introduces all equipment to athletes before going out onto snow.
- Coach assists athlete, as necessary, with putting on appropriate clothing.
- Coach assists athlete, as necessary, with putting on helmet.
- Coach assists athlete, as necessary, with putting on ski boots.
- Coach assists athlete, as necessary, with stepping into the binding, before going out onto snow.
- Coach ensures that all equipment fits the athletes properly, with the assistance of a qualified equipment technician.
- Coach checks athlete for a balanced and centered stance.
- Coach introduces flexion and extension of the knees and ankles.
- Coach may introduce ski poles to the athlete, when necessary.

Teaching Alpine Skiing Skills

On-snow Training

Beginner Skier

The ability level of the beginner skier ranges from an athlete who has no experience with the sport to an athlete who can perform controlled linked turns on a novice course. The beginner skier will start to ski on the flat terrain in a controlled learning environment and progress to the easiest slope on the mountain.

Typically the beginner skier will compete in the:

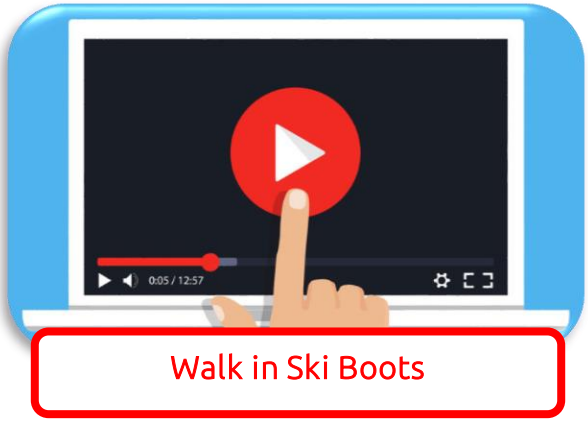
- 10 Meter Walk
- Glide
- Super Glide

Walk in Ski Boots

Athlete can walk independently in ski boots.

Teaching Points – Walk in Ski Boots

- Coach identifies if an athlete feels comfortable walking independently in ski boots.
- Athlete can stand on one foot while wearing ski boots.
- Athlete can climb stairs while wearing ski boots.
- Athlete can hop while wearing ski boots.
- Athlete can walk on snow in ski boots.
- Athlete can carry skis while walking on snow in ski boots.



Walk in Ski Boots

Faults & Fixes – Walk in Ski Boots

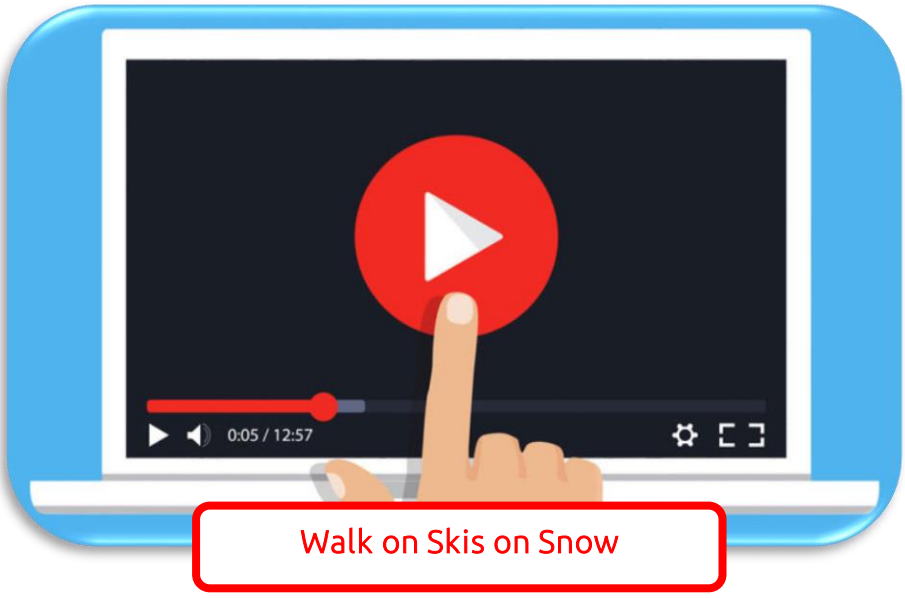
Error	Correction	Drill Reference
Athlete does not feel comfortable walking independently in ski boots.	Check for balanced stance. Provide assistance until the athlete feels more comfortable.	Walk with the athlete until he/she feels comfortable walking in ski boots.
Athlete has difficulty walking on snow in ski boots.	Check for balanced stance. Provide assistance until the athlete feels more comfortable. Identify athlete's hesitation, as it may slow his or her learning progress.	Walk with the athlete until he/she feels comfortable walking in ski boots. Build trust between the coach and the athlete.

Walk on skis on snow

Athlete can walk independently (forward, backward and in a circle) on skis on flat terrain. Once your athlete completes this task, he or she may be able to train and compete in the 10 Meter Walk event for athletes with lower ability levels as outlined in the Official Special Olympics Rules for Alpine Skiing.

Teaching Points – Walk on Skis on Snow

- Athlete can step into the binding, on snow.
- Athlete can walk independently on one ski on flat terrain.
- Athlete can walk independently on one ski, forward, on flat terrain.
- Athlete can walk independently on one ski, backward, on flat terrain.
- Athlete can walk independently on one ski, in a circle, on flat terrain.
- Athlete can walk independently on two skis on flat terrain.
- Athlete can walk independently on two skis, forward, on flat terrain.
- Athlete can walk independently on two skis, backward, on flat terrain.
- Athlete can walk independently on two skis, in a circle, on flat terrain.
- Athlete can train for the 10 Meter Walk event.
- Athlete can compete in the 10 Meter Walk event.



Faults & Fixes – Walk on Skis on Snow

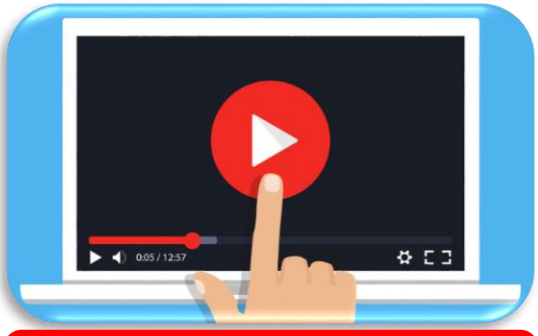
Error	Correction	Drill Reference
Athlete cannot step into the binding on snow.	Provide assistance to athlete as needed. Check for excess snow on the bottom of the ski boot. Check if the binding is positioned to accept the ski boot (released).	Hold onto coach's ski pole, arm, back, etc., for balance Teach the athlete to scuff the bottom of his/her ski boot.
Athlete cannot walk independently in one ski.	Provide assistance to athlete as needed.	Red Light/ Green Light on one ski Tag on one ski Duck, Duck, Goose Follow the leader
Athlete cannot walk independently in two skis.	Provide assistance to athlete as needed. Have the athlete go back to walking independently in one ski.	Red Light/ Green Light on two skis Tag on two skis Duck, Duck, Goose Follow the leader
Athlete loses balance and falls.	Check for balanced stance. Determine why the athlete may have fallen; correct as necessary.	Fall down and get up drill (Yard Sale) Follow the leader
Tips or tails of skis cross.	Check for balanced stance. Provide tip clamp if necessary. Make sure equipment fits properly.	

Side step

Athlete can step sideways with skis perpendicular to the fall line of a hill. Athlete side steps from flat to easiest sloped terrain.

Teaching Points – Side Step

- Athlete can step sideways on a flat terrain.
- Athlete is introduced to skating on skis (edge awareness) on a flat terrain.
- Athlete is introduced to terrain change.
- Coach introduces the athlete to the fall line of a hill.
- Athlete can step sideways up the easiest sloped terrain with skis perpendicular to the fall line of a hill.
- Have the athlete repeat this practice while facing in the opposite direction.



Side Step

Faults & Fixes – Side Step

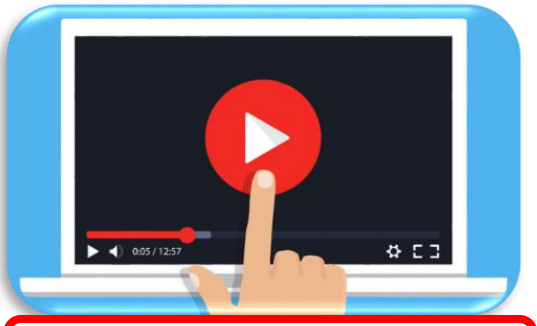
Error	Correction	Drill Reference
Athlete cannot skate on a flat terrain.	Teach the athlete to begin skating on one ski. Teach the athlete how to herringbone.	Follow the leader Tag
Athlete cannot hold an edge while side stepping up a hill.	Teach the athlete how to engage the edge of the ski.	Moving knees and ankles into the hill
Athlete slides forward/ backward while side stepping up a hill.	Teach the athlete how to stay perpendicular to the fall line of a hill.	Walk sideways up the "stairs." Demonstration of fall line

Straight run/ Straight wedge

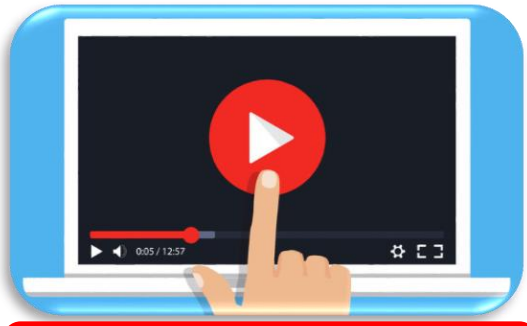
Athlete moves the skis into the fall line and slides down, on skis, the easiest terrain in a balanced, centered stance. Athlete performs the same action in a small wedge (skis are in a converging position in which the tips are closer than the tails). Once your athlete completes this task, he or she may be able to train and compete in the Glide event for athletes with lower ability levels as outlined in the Official Special Olympics Rules for Alpine Skiing.

Teaching Points – Straight run/ Straight wedge

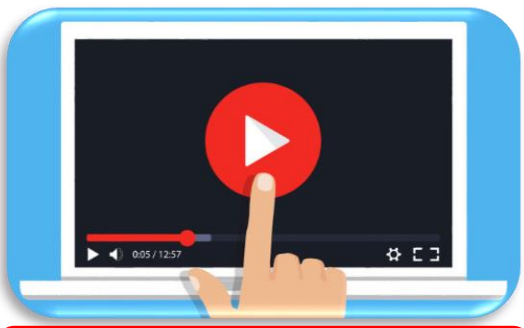
- Athlete side steps 10-15 side steps up the easiest terrain.
- Athlete can move the skis into the fall line from a side step position (perpendicular to the fall line).
- Athlete maintains a balanced, centered stance with hands out and forward, while sliding to a natural run-out.
- Athlete flexes and extends the knees and ankles while sliding.
- Athlete can vary the size of the wedge to control speed while sliding, when appropriate.
- Athlete can move the skis out of the fall line to control speed while sliding, when appropriate.



Straight Run/Wedge 1



Straight Run/Wedge 2



Straight Run/Wedge 3

Faults & Fixes – Straight run/ Straight wedge

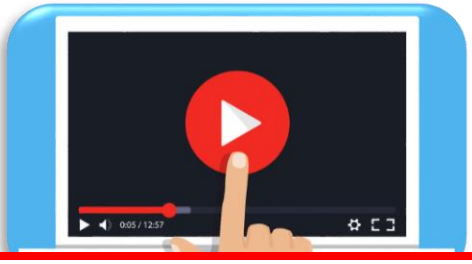
Error	Correction	Drill Reference
Athlete cannot control speed of skis.	Start the athlete lower on the easiest terrain, and repeat exercise.	
Athlete cannot move the skis into the fall line.	Coach should stand in front of the athlete to help as he/she moves into the fall line.	
Athlete cannot maintain a wedge while sliding.	Maintain the shin/ boot contact.	Squash the grape/orange
Athlete crosses ski tips while in wedge.	Maintain the shin/ boot contact. Use a tip clamp on the skis.	Squash the grape/orange
Athlete cannot flex or extend the knees and ankles.	Check equipment. Start the athlete lower on the easiest terrain, and repeat exercise. Check to see if the athlete is in an athletic position through the movement.	

Wedge turn to a stop or Flat ski turn to a stop

Athlete develops fundamental skills (balance, rotation, edge and pressure) necessary to change direction out of the fall line while on the easiest, most gentle terrain. Athlete learns to control speed by utilizing turn shape.

Teaching Points – Wedge turn to a stop

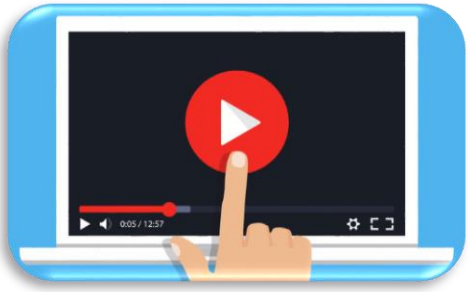
- Starting in a shallow traverse, in a wedge position, the athlete will turn up the hill to a stop.
- Starting in a shallow traverse in the other direction, in a wedge position, the athlete will turn up the hill to a stop.
- With success, the athlete will repeat this maneuver while gradually starting closer to the fall line each time.
- Starting in the fall line, with skis in a wedge, the athlete will steer the skis while moving until he/she is across the hill, out of the fall line, in one direction.
- Starting in the fall line, facing the other direction, with skis in a wedge, the athlete will steer the skis while moving until he/she is across the hill, out of the fall line, in that direction.



Wedge Turn to Stop

Teaching Points – Flat ski turn to a stop

- Starting in a shallow traverse, with skis parallel, the athlete will turn up the hill to a stop.
- Starting in a shallow traverse in the other direction, with skis parallel, the athlete will turn up the hill to a stop.
- With success, the athlete will repeat this maneuver while gradually starting closer to the fall line each time.
- Starting in the fall line, the athlete will direct the skis across the hill while moving out of the fall line, in one direction.
- Starting in the fall line, facing the other direction, the athlete will direct the skis across the hill while moving out of the fall line, in that direction.



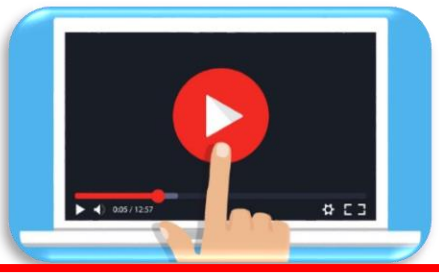
Flat Ski Turn to a Stop

Faults & Fixes – Wedge turn to a stop or Flat ski turn to a stop

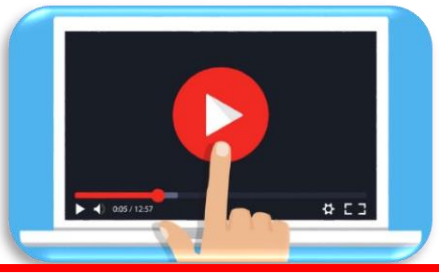
Error	Correction	Drill Reference
Athlete turns too far into the turn and slides backward.	Use cue words to instruct the athlete when to stop the turn.	Use a ski pole for the athlete to ski around.
Athlete gets out of a wedge position.	Use cue words or visual aids to instruct the athlete.	Pizza slice
Athlete cannot stop.	Review straight run procedure and re-introduce wedge to a stop. Move athlete down to a gentler slope.	
Athlete continuously falls over.	Check for balanced, centered stance. Make sure the athlete's feet are at least hip width apart.	Ski with a basketball-size ball between the knees.
Athlete can turn in one direction only.	Start the turn on the weaker side using a shallower traverse.	

Riding a ski lift (ski lift awareness)

There may be a variety of ski lifts offered at ski areas around the world. At this level the athlete will use the ski lift that accesses the easiest terrain



Riding a Ski Lift 1



Riding a Ski Lift 2

Teaching Points – Riding the ski lift (ski lift awareness)

Have your athlete watch other skiers using the ski lift so that he/she becomes more familiar with the process.

Simulate, with your athlete, lift procedures (getting on and getting off of the ski lift) and etiquette.

Communicate with the lift operators that your athlete is a new rider on the ski lift, and allow them to help your athlete.

When possible, the coach should ride with your athlete on the ski lift.

While on the ski lift, reiterate to your athlete the process of getting off of the ski lift.

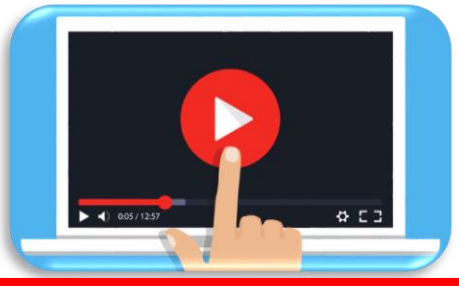
Faults & Fixes – Riding the ski lift (ski lift awareness)

Error	Correction
Athlete is afraid of heights.	Coach must redirect the focus of the athlete.
Athlete forgets to get off of the lift.	Assist the lift operator, as appropriate.
Athlete falls off the ski lift.	Assess the situation and ensure the safety of the athlete. Review lift procedures with your athlete.

Controlled linked turns on easiest terrain

Athlete can link turns, controlling speed and turn radius, on easiest terrain. Once your athlete completes this task, he/she may be able to train and compete in the Super Glide event for athletes with lower ability levels as outlined in the Official Special Olympics Rules for Alpine Skiing.

Teaching Points – Controlled linked turns on easiest terrain



Controlled Link Turns (Easy Terrain)

- Athlete can link a turn in one direction to a turn in the opposite direction with a slight rising motion toward the new turn as both skis are steered into the fall line; when appropriate, allow for a controlled stop.
- Athlete's hips should remain centered over the ski, while the center of mass moves slightly to the inside of the turn.
- Athlete can link turns with rhythm, flow and control from turn to turn.

Faults & Fixes – Controlled linked turns on easiest terrain

Error	Correction	Drill Reference
Athlete cannot perform the maneuver consistently on the terrain.	Review and apply previously learned skills throughout progression. Implement fundamentals in your teaching progression. Practice the maneuver on easier terrain.	Add a new twist/ keep the fun in fundamentals.
Athlete turns better in one direction than the other.	Practice turns in the weaker direction. Assess the reason for the weakness on one side.	Garland Drill Strength training on weaker side Modify equipment to compensate for weakness on one side.
Athlete locks edge on one side, which does not allow for smooth turns.	Center of mass must be over center of skis.	Flatten uphill ski – Thumpers Put a beach ball/balloon between the knees and "don't pop the balloon."

Novice Skier

The ability level of the novice skier ranges from an athlete who can perform controlled linked turns on a novice course to an athlete who can perform Christie-type linked turns (skidded turns) on an intermediate course.

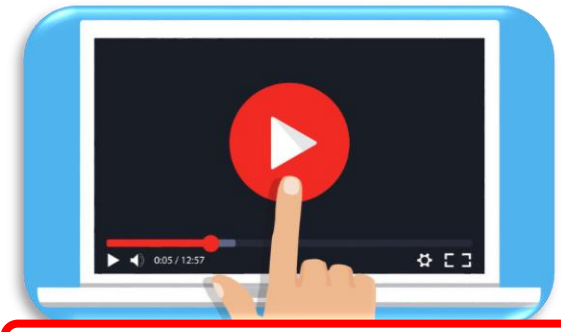
The novice skier will refine his/her beginner skills on the easiest slope on the mountain.

Can Your Athlete:

- Perform controlled linked turns on a novice course
- Develop necessary fundamental movement patterns through each turn
- Ski the easiest terrain on the mountain in control
- Vary turn shape and size
- Perform Christie-type turn (skidded turn)
- Perform Christie-type turn (skidded turn) on intermediate course

Controlled linked turns on a novice course

Athlete can ski on the easiest terrain, making rounded turns in both directions with rhythm and flow from turn to turn. Speed is under control for the entire length of the trail.



Controlled Link Turns (Novice Terrain)

Teaching Points – Controlled linked turns on a novice course

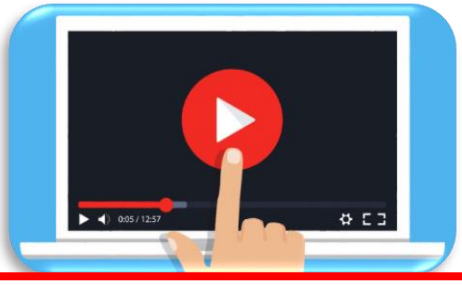
- Athlete can make rounded turns in both directions.
- Athlete maintains speed control while turning.
- Athlete can maintain speed control while turning as slope degree changes.
- Athlete can maintain control while turning in a variety of snow conditions.
- Athlete can understand moving between gates from red to blue.

Faults & Fixes – Controlled linked turns on a novice course

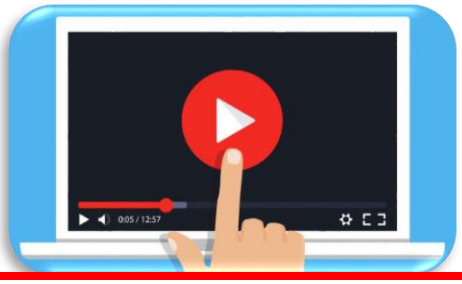
Error	Correction	Drill Reference
Athlete cannot maintain speed control while slope degree changes.	Lack of edge control while terrain changes. Edging drills to enhance edging. Work on turn completion.	Hockey stops Count slowly to 3 while athlete is turning.
Athlete cannot make rounded turns.	Provide visual cues to promote rounded turn shape.	Use cones or halved tennis balls as turn guides.
Athlete cannot maintain balance in adverse (icy/soft) conditions.	Review balanced, centered stance position.	

Develop fundamental movement patterns through the turn

Athlete moves the center of mass smoothly through the turn in the direction of the new turn to initiate the new turn. Athlete is able to skid the skis through the end of the turn.



Fundamental Movement Patterns Through the Turn 1



Fundamental Movement Patterns Through the Turn 2

Teaching Points – Develop fundamental movement patterns through the turn

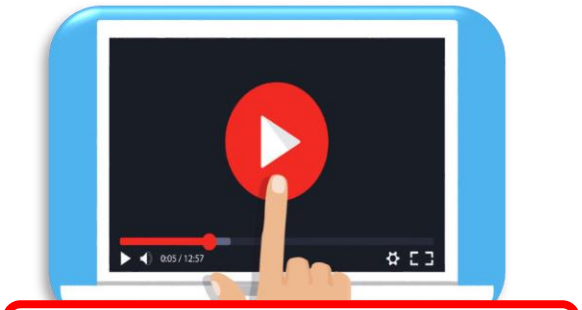
- Athlete can move center of mass in the direction of the new turn.
- Athlete flexes ankles as the skis move through the turn.
- Athlete makes rounded turns.
- Athlete transfers weight laterally from one ski to the other during the turn.

Faults & Fixes – Develop fundamental movement patterns through the turn

Error	Correction	Drill Reference
Athlete leans back.	Athlete needs ankle flex. Boots are too stiff.	Squash the grape/orange
Athlete steers too far around.	Coach assists the athlete with verbal cues to start the next turn.	Ski poles balanced on wrist, upper body faced downhill.
Lack of weight transfer.	Weight on outside ski. Wedge turns.	Exaggerated wedge turns with flexion-extension.

Ski the easiest terrain on the mountain under control

Athletes are able to ride the appropriate lift independently and ski all of the easiest terrain available. They will maintain rounded turn shape and speed control while skiing independently, if disability permits.



Ski on the Easiest Terrain

Teaching Points – Ski the easiest terrain on the mountain under control

- Athlete can ride all appropriate lifts independently if/when appropriate.
- Athlete can consistently make rounded turns on easiest terrain.
- Athlete can stop immediately when needed.
- Skiing the easiest terrain on the mountain is obviously in the comfort zone of the athlete.

Faults & Fixes – Ski the easiest terrain on the mountain under control

Error	Correction	Drill Reference
Athlete cannot ride lift independently.	Coach gives cues to initiate loading and unloading. Practice with coach in chair behind.	Use one-word loading/unloading cues.
Athlete cannot make rounded turns.	Coach cues when to finish one turn and start the new turn.	Use cones or red dye in the snow as visual aids to initiate and indicate the path of rounder turns.

Vary turn size and shape

Athlete can perform long, medium and short radius turn. Athlete is able to execute different shaped turns with a smooth transition.

Teaching Points – Vary turn size and shape

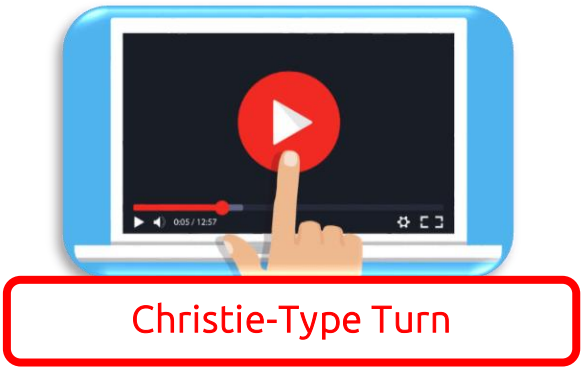
- Athlete can perform long, medium and shorter radius turns.
- Athlete can maintain speed while changing radius of turns.
- Athlete can ski around cones, gates or other obstacles as necessary.

Faults & Fixes – Vary turn size and shape

Error	Correction	Drill Reference
Athlete over –rotates, making it hard to get the new turn started.	Short radius turns.	Ski poles over wrists. Exaggerated upper body faced down the hill or fall line.
Athlete cannot do short radius turns.	Athlete is working on terrain that is too steep for the manoeuvre.	Skating on flat or easiest terrain.
Athlete picks up speed in his/her descent down the hill.	Athlete needs to work on edge management while turning.	Sideslip with a stop.

Perform a Christie-type turn (skidded turn)

Athlete can move from a wedge turn to a skidded turn in both directions.



Christie-Type Turn

Teaching Points – Perform a Christie-type turn (skidded turn)

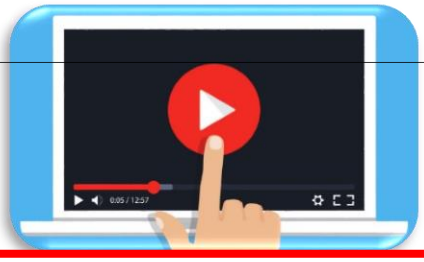
- Athlete can do a traverse across the hill in both directions.
- Athlete can do a forward sideslip in both directions.
- Athlete can ski comfortably on the easiest terrain on the hill.
- Athlete can do a wedge turn with a traverse at the end of the turn.
- Athlete can do a wedge turn with a forward sideslip at the end of the turn.

Faults & Fixes – Perform a Christie-type turn (skidded turn)

Error	Correction	Drill Reference
Athlete cannot hold an edge doing a traverse.	Athlete cannot stay on edge. Athlete is not in a balanced stance.	Coach stands below the athlete and moves the knees into the hill. Coach stands below the athlete and tries to pull the athlete down the hill, while athlete tries to hold position on the hill. Bunny Hops
Athlete cannot do a forward sideslip.	Athlete is leaning into the hill. Athlete learns edge release.	Garlands

Perform Christie-type linked turns (skidded turns) on an intermediate course

Athlete can perform skidded turns on intermediate terrain through gates on the same hill.



Christie-Type Turn on Intermediate Terrain

Teaching Points – Perform Christie-type linked turns (skidded turns) on an course

- Athlete can perform Christie-type turns on intermediate terrain.
- Athlete can maintain rounded turn shape while skiing on a course.
- Athlete is comfortable with increased speed of the intermediate terrain.

Faults & Fixes – Perform Christie-type linked turns (skidded turns) on an intermediate course

Error	Correction	Drill Reference
Athlete skis at each gate.	Round out each turn by setting up for turn earlier.	Use cones or brushes as turning gates.
Athlete is not ready for intermediate course.	Go back to easier terrain or same hill with no gates and solidify skills.	Linked Christie-type turns on appropriate terrain
Athlete goes back to using a wedge, with no movement.	Athlete is on terrain that is too steep. Athlete should spend more time on gentler terrain and work on skills.	Linked Christie-type turns on appropriate terrain

Intermediate Skier

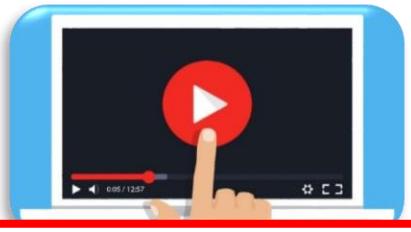
The ability level of the intermediate skier ranges from an athlete who can perform Christie-type linked turns (skidded turns) on an intermediate course to an athlete who can perform controlled open parallel turns on an intermediate course. The intermediate skier will continue to refine his/her skills on more difficult terrain.

Can Your Athlete:

- Perform Christie-type linked turns on an intermediate course
- Refine fundamental movement patterns through the turn
- Change radius of turns to suit snow conditions and terrain
- Perform controlled open parallel turns
- Perform controlled open parallel turns on an intermediate course

Perform Christie-type linked turns (skidded turns) on an intermediate course

Athlete can maintain Christie-type turns in both directions through an intermediate course. Speed control is maintained for the entire length of the course for safety.



Christie-Type Link Turns (Intermediate Terrain)

Teaching Points – Perform Christie-type linked turns (skidded turns) on an intermediate course

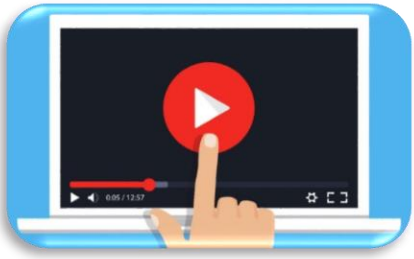
- Athlete can maintain Christie-type turns on varied terrain.
- Athlete can vary the size or radius of the turn to maintain consistent speed.
- Athlete can maintain consistent speed doing Christie-type turns on different pitches.
- Athlete moves center of mass in the direction of the new turn.

Faults & Fixes – Perform Christie-type linked turns (skidded turns) on an intermediate course

Error	Correction	Drill Reference
Athlete cannot maintain Christietype turns.	Use edge control to maintain skid during the turn Maintain turn completion	Garlands Hockey Stops
Athlete cannot maintain consistent speed.	Athlete uses a breaking wedge for speed control.	Garlands Falling Leaf

Refine fundamental movement patterns through the turn

Athlete can move his/her center of mass though the turn in the direction of the new turn.



Fundamental Movement Patterns through the Turn

Teaching Points – Refine fundamental movement patterns through the turn

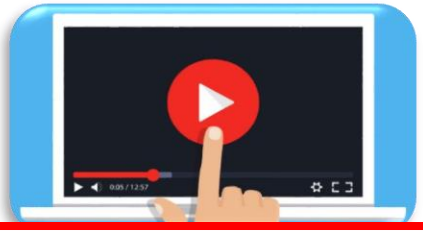
- Athlete moves center of mass down the hill in the direction of the new turn.
- Athlete skis with shoulders parallel to the slope of the hill.
- Athlete maintains speed control through turn.
- Athlete maintains balanced stance, with ankles flexed and hips over center of boot, through each turn.

Faults & Fixes – Refine fundamental movement patterns through the turn

Error	Correction	Drill Reference
Athlete uses upper body rotation to finish the turns.	Work on edging skills. Work on moving the body in the direction of the new turn at the beginning of the turn.	Sideslips Sideslips with body facing down the hill Falling Leaf
Athlete does “Z” turns.	Athlete should decrease emphasis on the end of the turn and braking. Work on turn initiation.	Popcorn turns Frog jumps over the log Count to 5 (out loud) through each turn.

Change radius of turns to suit snow conditions and terrain

Athlete can vary the size of the turns to maintain control while skiing on various terrains and/or in a variety of snow conditions.



Change Turn Radius

Teaching Points – Change radius of turns to suit snow conditions and terrain

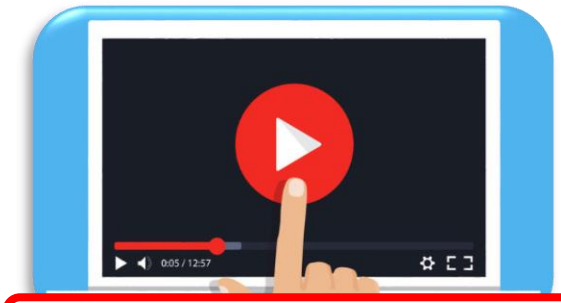
- Athlete can perform long, medium and short radius turns.
- Athlete can ski on a variety of terrain pitches at consistent speed.
- Athlete can maintain balanced stance in multiple snow conditions.

Faults & Fixes – Change radius of turns to suit snow conditions and terrain

Error	Correction	Drill Reference
Movement patterns change on steeper terrain.	Reinforce edging skills on less steep terrain.	Sideslip Falling Leaf
Speed control is lost doing short radius turns.	Athlete should maintain edge control Practice on less steep terrain.	Hop Turns Skating on flats or easy terrain Skating into short radius turns on easy terrain
Athlete is not able to change the radius smoothly.	Athlete gradually reduces radius of the turn.	Hourglass Funnel turns

Perform controlled open parallel turns

Athlete can ski with skis parallel throughout the turn on intermediate to beginning advanced terrain.



Open Parallel Turns

Teaching Points – Perform controlled open parallel turns

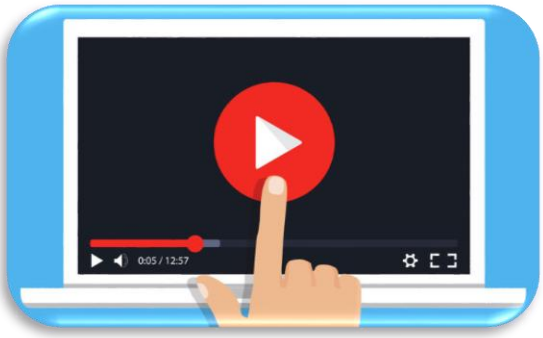
- Athlete can keep parallel ski relationship throughout the turn and from turn to turn.
- Athlete can maintain consistent speed on varied pitches.
- Athlete maintains balanced stance throughout the turn.
- Athlete uses pole swing to initiate turns.

Faults & Fixes – Perform controlled open parallel turns

Error	Correction	Drill Reference
Athlete reverts to breaking wedge to control speed.	Develop edging skills on easier terrain.	Boot skiing on easiest terrain Sideslip in vertical corridor Sideslip with clean stop
Athlete does "Z" turns to control speed.	Work on turn initiation.	Garlands Count to 5 for each turn from beginning to end.
Athlete leans to the inside of the turn.	Athlete needs to develop strong inside half, with shoulders parallel to the hill.	
Athlete swings the wrong pole.	Traverse with pole swing on downhill side.	Mark poles; coach calls out markings at appropriate time.
Athlete swings pole at the wrong time or not at all.	Practice.	Garlands Traverse with pole swings With coaching, athlete shouts "pole" at appropriate time for pole swing.

Perform controlled open parallel turns on an intermediate course

Athlete can maintain skis parallel and balanced stance using fundamental movement patterns while on a course.



Open Parallel Turns (Intermediate Course)

Teaching Points – Perform controlled open parallel turns on an intermediate course

- Athlete can keep parallel ski relationship throughout the turn and from turn to turn while on the course.
- Athlete projects his/her core in the direction of the turn, to flow downhill while on the course.
- Athlete can maintain good hand position, up and in front, to enhance balance and good body position.
- Athlete can maintain speed control on varied terrain.
- Athlete can push out of the start gate.
- Athlete can get into a tuck position for skiing over flats and through the finish.

Faults & Fixes – Perform controlled open parallel turns on an intermediate course

Error	Correction	Drill Reference
Athlete reverts to wedge to control speed.	Athlete needs more work on gentler terrain. Develop edging skills on gentler terrain. Athlete needs more time free skiing on steeper terrain.	Boot skiing on easiest terrain Sideslip in vertical course Sideslip with clean stop Falling Leaf with pivot turn on mild intermediate terrain Garland on steeper terrain
Athlete does “Z” turns to control speed.	Work on turn initiation. Return to easier terrain to work on skills. Athlete needs more time free skiing on steeper terrain.	Count to 5 (out loud) for each turn from beginning to end.
Athlete leans to the inside of the turn.	Athlete needs to develop strong inside half, with shoulders parallel to the hill.	Traverse with proper stance Pole drag with both poles on the snow, hands in front, always within sight
Athlete drops inside hand or both hands while turning.	Practice holding hands in proper position.	Hold poles horizontally (like a tray) and keep them horizontal.

Advanced Skier

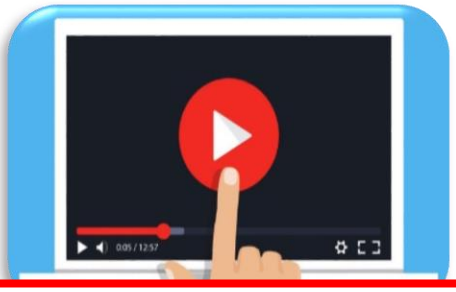
The ability level of the advanced skier is an athlete who can perform controlled open parallel turns to an athlete who can perform controlled dynamic parallel turns on an advanced course. The advanced skier will refine his/her intermediate skills on the most difficult terrain.

Can Your Athlete:

- Perform consistent open parallel turns on an advanced course
- Increase and decrease speeds on difficult terrain
- Carve turns in a variety of shapes and snow conditions
- Perform dynamic parallel turns on an advanced course

Perform consistent open parallel turns on an advanced course

Athlete can ski on more advanced terrain with skis parallel throughout the turn.



Open Parallel Turns (Advanced Terrain)

Teaching Points – Perform consistent open parallel turns on an advanced course

- Athlete can maintain parallel ski relationship while on more advanced course.
- Athlete can take an efficient, effective line through a course.
- Athlete can maintain fundamental movements (centered stance, core moving in the direction of the new turn, hands in front) necessary to ski in control on advanced terrain.

Faults & Fixes – Perform controlled open parallel turns on an advanced course

Error	Correction	Drill Reference
Athlete cannot maintain speed control on steeper terrain.	Athlete works on edging skills on gentler terrain, before going to the steeper terrain.	Garlands on steeper terrain Leapers Crab Walk Hop turns to short radius turns on gentler terrain
Athlete skis at the gate and finishes the turn after the gate.	Athlete works on developing a correct line/path of travel through the gates.	Use cones or brushes (or whatever you have to work with) as turning gates.
Athlete sits back, using upper body rotation through the turns.	Check to see that athlete is aligned properly. Boots are too stiff. Review proper movement patterns.	Review hand position, stance. Athlete holds object in hand and doesn't let it out of his/her sight.

Increase and decrease speeds on difficult terrain

Athlete can ski on more advanced terrain with skis parallel throughout the turn.

Teaching Points – Increase and decrease speeds on difficult terrain

- Athlete can maintain consistent speed on varied degree of slope.
- Athlete can push out of the start gate to accelerate the start.
- Athlete can use edges to increase or decrease speed when necessary.
- Athlete can do a proper tuck position for straightaways and going through the finish.
- Athlete can skate over flat terrain.

Faults & Fixes - Increase and decrease speeds on difficult terrain

Error	Correction	Drill Reference
Athlete skids skis to decrease speed on steeper terrain.	Work on edging skills.	Garlands to promote strong finish of the turn with good edge engagement Crab Walk
Athlete cannot get into a proper tuck position.	Athlete practices getting into the tuck position in front of a mirror.	Toe touches with a squat
Athlete cannot skate smoothly.	Athlete works with shorter skis to get the motion before trying it with his/her own skis.	Do skating move in boots.

Carve turns in a variety of shapes and snow conditions

Athlete can ski on more advanced terrain with skis parallel throughout the turn.

Carve Turns

Teaching Points – Carve turns in a variety of shapes and snow conditions

- Athlete can do carved long, medium and short radius turns.
- Athlete can manage turn shape and speed control in a variety of snow conditions.
- Athlete can smoothly transition between differing turn size and shapes as dictated by terrain or changes in pitch.

Faults & Fixes – Carve turns in a variety of shapes and snow conditions

Error	Correction	Drill Reference
Athlete cannot pivot the ski.	Athlete is not in balanced stance. Athlete is not centered. Check alignment.	Athlete pivots from a straight run to an edged ski in the fall line, perpendicular to the slope (to a sideslip in a corridor).
Athlete skids the skis in a turn on one side or the other.	Athlete should work on weaker side. May be disability related.	Garlands to work on edge control on weaker side One-ski turns
Athlete cannot make smooth transitions from short to medium to long radius turns.	Develop fluidity in turn.	Funnel Hourglass Turns to a cadence (counting, singing, etc.)
Athlete cannot maintain speed control.	Work on consistent turn shape.	Maintain same-speed medium to short radius turns on steep to flat terrain.

Perform dynamic parallel turns on an advanced course

Athlete can ski on more advanced terrain with skis parallel and on edge throughout the turn in most all conditions and terrain.

Teaching Points – Perform dynamic parallel turns on an advanced course

- Athlete shows dynamic stance while racing on an advanced course.
- Athlete is able to carve turns through the gates.
- Athlete is able to do short radius turns.
- Fundamental movements are consistent throughout the turns from top to bottom.

Faults & Fixes – Perform dynamic parallel turns on an advanced course

Error	Correction	Drill Reference
Athlete has inappropriate range of balance.	Athlete must maintain centered position.	Ski on one ski on intermediate terrain. Skate down intermediate terrain.
Athlete scrubs (reduces) speed.	Work on turn shape. Develop more efficient and effective line/path through the course. Work on turn initiation.	Work on "J" turns on steeper terrain. Skate down the hill. Use cones or brushes to develop more effective line through the course.
Athlete fatigues on short radius turns.	More dry-land training. Review proper movement pattern.	Pivot turns to short radius turns More skating for longer distances Boot skiing

Modifications and Adaptations

In competition, it is important that the rules not be changed to suit athletes' special needs. There are, however, approved Alpine skiing aids that do accommodate the athlete's special needs and are permitted in the rules. Also, coaches can modify training exercises, communication methods and sport equipment to assist athletes in achieving success.

Modifying Exercises

Modify the techniques and skills involved in an exercise so that all athletes can participate. For example, a skier with one leg may use the same movement patterns, but will not be able to do a wedge/pizza. Or, an athlete skiing in sit-down equipment will use the same tactics, but only those parts of his/her body that will move, to make the turns happen.

Accommodating an Athlete's Special Needs

Use the sound of a bell or voice commands for visually impaired athletes.

Modifying Your Communication Method

Different athletes require different communications systems. For example, some athletes learn and respond better to demonstrated exercises, whereas others require greater verbal communication. Some athletes may need a combination – to see, hear and even read a description of the exercise or skill.

Modifying Equipment

Successful participation for some athletes requires equipment modifications to suit their particular need. Some athletes may need to have a toe clip that holds the tips of the skis together. An athlete with difficulty with balance may need to use outriggers to maintain a balanced stance. Because of a substantial disability that does not allow the athlete to walk unassisted, he/she may need to ski in sit-down equipment.

Adaptations

More specific adaptations for Alpine skiing are listed below.

Outriggers

Used for athletes who have difficulties with balance in motion.

Mono-skis or bi-skis

Used for athletes who do not have the use of their legs. Many bi-skis can be tethered as needed for those athletes who cannot ski the bi-ski independently. Mono-skis can be skied independently.

Toe clips

Used for stand-up athletes who may have difficulty holding their skis together. In training, coaches can use other adaptive equipment, such as hoola-hoops and tether lines, during training to teach particular movement patterns; however, these assistive devices must not be used in competition.

Orthopedic Impairments

Leg braces may be used for athletes needing the support. Often the stiffness of the ski boot is enough to hold the athlete erect and give the athlete adequate support while skiing.

Auditory Impairments

Use a flag or hand signals for start. It is imperative that the starter knows the auditory impairments of any athlete in order to meet the needs of the athlete.

Visual Impairments

A visually impaired skier must have a guide while skiing. The guide will wear an orange bib and ski in front of the athlete while on the race course. The guide will give signals, either by voice command or using voice activated radios.

Alpine Skiing Fitness Section

Fit 5 + Other Special Olympics Resources

Special Olympics provides a range of fantastic fitness resources that coaches and athletes can use to educate themselves on best practice around physical activity, nutrition and hydration.

There are many health-related and performance-related benefits of fitness for Special Olympics athletes.

Benefits of Fitness for Athletes

- Enhanced sport performance through improved
  - Endurance/stamina.
  - Speed and agility.
  - Strength and power.
  - Flexibility.
- Healthy weight.
- Increased energy level, improved focus, and better recovery after practices & games.
- Reduced risk for sport-related injuries.
- Decreased risk for illnesses and chronic diseases.
- Improved quality of life.

Physical Activity Outside of Special Olympics

It is vital that Special Olympics programs are not the only source of physical activity and exercise for athletes. As a coach, you should be encouraging your athletes to exercise every day and educate them on ways to stay active outside of organized sport practice.

There are numerous ways that athletes can exercise to stay healthy when they are at home. Walking, running, and biking are simple ways an athlete can exercise on their own and work on their cardiovascular fitness. Fitness classes like yoga, core strength, HIIT and many others are great ways for athletes to work on their fitness and physical health outside of organized sports practice.

Special Olympics offers the Fit 5 Guide for athletes and coaches to use. As a coach it is a great resource to use when educating your athletes on the benefits of physical activity to their overall health and to their sports performance.

Fit 5

The Fit 5 Guide is a plan for physical activity, nutrition and hydration that can help to improve athletes' health and fitness and make them the best athlete they can be. The Fit 5 Guide and accompanying Fitness Cards provide a fantastic collection of exercises that athletes should do to assist them to improve the skills needed for their sport. The exercises included focus on Endurance, Strength, Flexibility and Balance.

In addition to these resources, there are a number of videos available here for athletes and coaches to view and use when performing these exercises as part of their training plans.

Nutrition

Eating right is important to your health and your sports performance. Nutrition and hydration are key points of athlete preparation and recovery for all forms of exercise. However, most athletes don't understand the connection between nutrition/hydration and sports performance. As a coach, it is important that you emphasize this connection and educate your athletes on correct habits. This is especially important for Special Olympics athletes, as they are at a higher risk for obesity.

It is vital to educate alpine skiers about the importance of timing their meals or snacks prior to training or competition. Inform your athletes of the risk of eating too close to the time they are to train or compete, and educate them on the best times and foods to eat to ensure they are efficiently fuelled to perform.

Specifically, alpine skiers should be aware of the effects of climate and altitude on their nutritional needs. It is recommended to eat higher amounts of carbohydrates (e.g. sweet potatoes, apples, whole grain rice) and iron-rich foods. At elevation, there

is an increased need for iron in the body because of the blood cell adaptations that occur in a lower oxygen environment. As a result, iron deficiency is the most common nutritional deficiency in winter sport. Some great sources of iron are spinach, red meats, seafood and beans.

It is recommended to have your last meal or snack at least 90 minutes before completing any exercise. This ensures the athlete can digest the food and it will be available as a fuel source for them when training or competing.

You can utilize the nutrition and hydration section in the Fit 5 Guide to educate your athletes on basic principles. The nutrition, hydration and exercise tracker can help your athletes to pay more attention to these elements at home.

Task: Consider taking 5 minutes at the end of practice to cover nutrition and hydration tips. Educate parents and carers on the information that's shared with athletes so they can help athletes eat healthy at home.

Hydration

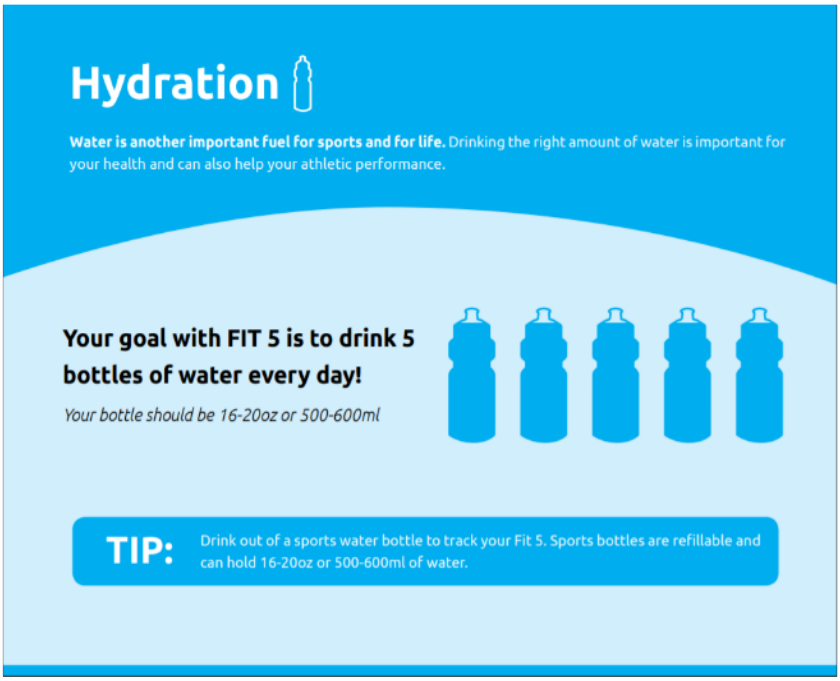
Water is another important fuel for sports and for life. Drinking the right amount of water is important for your health and can also help your athletic performance. Coaches should be educating their athletes about the benefits of drinking enough water every day.

The Fit 5 Guide has a hydration section which provides information for coaches about quantities of water that athletes should be consuming, signs of dehydration in athletes, and the best choice athletes can make when looking for a drink.

As an alpine coach it is important to help you athletes keep on track with their hydration. Coaches should encourage athletes to take responsibility for their own hydration before, during and after training. The body's thirst signals may be a bit delayed in cold weather, but athletes will still be losing water through sweating and open mouth breathing. Higher altitudes also increase the need to be hydrated because of increased breathing rates that are experienced at higher elevations.

Encourage athletes to drink one bottle of water (16-20oz/500-600ml) an hour or two before practice so they show up fully hydrated. Remember to pause for drinks breaks during a training session. We would recommend pausing every 15-20 minutes to give your athletes the chance to rehydrate as they are losing water while exercising.

Encourage your **athletes to drink one bottle of water** (16-20oz/500-600ml) during a training session to make sure they do not get dehydrated. When drinking, athletes should take many small sips of water instead of gulping it down as this can sit in their stomachs and cause discomfort when exercising! Encourage athletes to drink water after practice to help them recover from their workout.



Alpine Skiing Warm-Ups and Cool-Downs

Warm-Up

Before beginning any form of physical activity you should always carry out a warm-up. A warm-up should be designed to prepare the body and mind for physical activity and reduces the risk of injuries occurring.

Purpose of a warm-up

- Gradual increase in body temperature.
- Gradual increase in heart rate.
- Gradual increase in breathing rate.
- Increase in blood flow to working muscles.
- Increase in range of motion of primary muscle groups for their sport.
- Mental preparation.

As you can see, warm-ups are extremely important for athletes' preparation for physical activity. Increasing body temperature and blood flow to working muscles is key for athletes to prevent them from sustaining injuries while exercising. A gradual increase in body temperature reduces the chance of an athlete sustaining muscle and tendon injuries while an increase in blood flow to working muscles ensures a delivery of import fuels that are required for energy production. In addition to this, warming up helps athletes increase the range of motion they have in their muscles. This adequately prepares athletes' working muscles for the movements they will be performing (stretching, generating power, stabilizing the body, etc.). Finally, an adequate warm-up will mentally prepare the athlete for exercise, this includes increased focus at practice or in competition, positive self-talk, or improved motivation knowing they are physically prepared to exercise.

It is recommended to carry out a comprehensive, sport specific warm-up for **at-least 15 minutes** prior to starting training activities or competition.

Comprehensive: Warming up all parts of the body. Focus especially on the main muscle groups involved in alpine skiing, including the abdominals, legs and shoulders.

Sport Specific: Performing movements your athlete will carry out during practice. For alpine skiing, you might include jumping, squats, and balance exercises.

Warm-ups should include three specific components:

1. Aerobic activity to raise heart rate
    - This can be walking, jogging, jumping or skipping.
2. Dynamic Stretching
    - Dynamic stretching involves active, controlled movements that take body parts through a full range of motion.
3. Sport Specific Movements
    - Skills or movements which are core to your sport.
    - Movements that the athlete will complete in training or competition.

See our Warm-Up and Cool-Down Supplement to learn more information on the components of a warm-up. The Dynamic Stretches Guide also provides a collection of exercises can be included in your warm-up.

Training Warm-Ups:

Sample Warm-Up 1: Snow Bottom of Ski Area and/or Top of Lift	
Aerobic Activity: 5-7 minutes	○ High Knees ○ Butt Kicks ○ Side to Side Bouncing ○ Forward Jacks
Dynamic Stretching: 15-20 repetitions of each	○ Forward Leg Swings ○ Lateral Leg Swings ○ Hip Circles ○ Arm Circles ○ Windmill Toe Touches
Sport Specific Movements: 5-10 minutes	○ Squat Jumps ○ Directed Skiing on Open Terrain

Sample Warm-Up 2: Snow Bottom of Ski Area and/or Top of Lift	
Aerobic Activity: 5-7 minutes	○ Light jog – 2 minutes ○ Jumping Jacks ○ Hops with Ski Boots
Dynamic Stretching: 15-20 repetitions of each	○ Forward Leg Swings ○ Lateral Leg Swings ○ Torso Twists ○ Arm Swings ○ Forward Lunges
Sport Specific Movements: 5-10 minutes	○ Single Leg Line Hops ○ Directed Skiing on Open Terrain

Competition Warm-Ups:

Before any athletic competition, an effective warm-up needs to be completed. Warm-ups are essential to preparing the athletes' bodies and minds for physical activity, which will improve their performance and reduce the risk of injury. Here are some tips for competition warm-ups:

- Have athletes do the same warm-up routine that they do during training sessions.
    - Athletes with intellectual disabilities do best when they follow consistent routines. Routines help athletes to build their confidence, skills and time on-task.
- If space is limited, encourage athletes to do aerobic activities in place, or go back and forth between the allotted space.
- Keep athletes active and moving during staging. If they are sedentary during this time, they will lose the benefits of their warm-ups, such as an increased body temperature and blood flow to working muscles
- It's possible that the aerobic activity and dynamic stretching can be conducted inside a building or facility, if space permits. Make sure the athletes stay warm if they conduct their initial warm-up outside, especially during the dynamic stretching phase.

Cool-Down

When your training, practice or sport session is complete, you should always cool-down. It is just as important to have a good cool-down as it is to have a good warm-up. A good cool-down allows the body to gradually return to a state of rest.

If space is available, it is a smart approach to bring the cool-down indoors. This will amplify your efforts to start the recovery process.

Purpose of a cool-down:

- Decrease heart rate.
- Decrease breathing rate.
- Decrease body and muscle temperature.
- Returns rate of blood flow from the active muscles to resting level.
- Decrease muscle soreness.
- Improve flexibility.
- Increases the rate of recovery from exercise.
- Promote relaxation.

A typical cool-down includes light aerobic activity followed by stretching. The aerobic activity should gradually decrease in intensity/difficulty. It could be a short jog/walk at 50% intensity with some stretches, led by the athletes, at the end.

Cool-downs are perfect opportunities for coaches to carry-out a debrief session with their athletes and review the session they have just had. Ask your athletes some open, informative questions that will make them think about the session and what they would have learned. In addition to the athletes reinforcing the coaching points you have given them, it also gives you, as a coach, the opportunity to see what works for each athlete as an individual.

Coaches should also use this time at the end of practice to encourage healthy habits. Educate athletes on the importance of staying active and eating healthy outside of practice.

Open Questions – Questions that cannot be answered with 'Yes' or 'No', for example:

"What part of the training session did you find challenging today?"

Informative Questions – Questions that provide useful information for you, as a coach, and for the athlete.

"What part (if any) of the training session did you enjoy most today?

Sample Cool-Down 1:	
Low Intensity:	○ Long, easy slope for the last run
Stretching: 30 seconds each	○ Standing Quadriceps Stretch ○ Kneeling Hip Stretch (Flexibility Level 3 – Fitness Cards) ○ Seated Rotation Stretch (Flexibility Level 5 – Fitness Cards) ○ Knee to Chest (Flexibility Level 1 – Fitness Cards) ○ Triceps Stretch (Flexibility Level 3 – Fitness Cards)

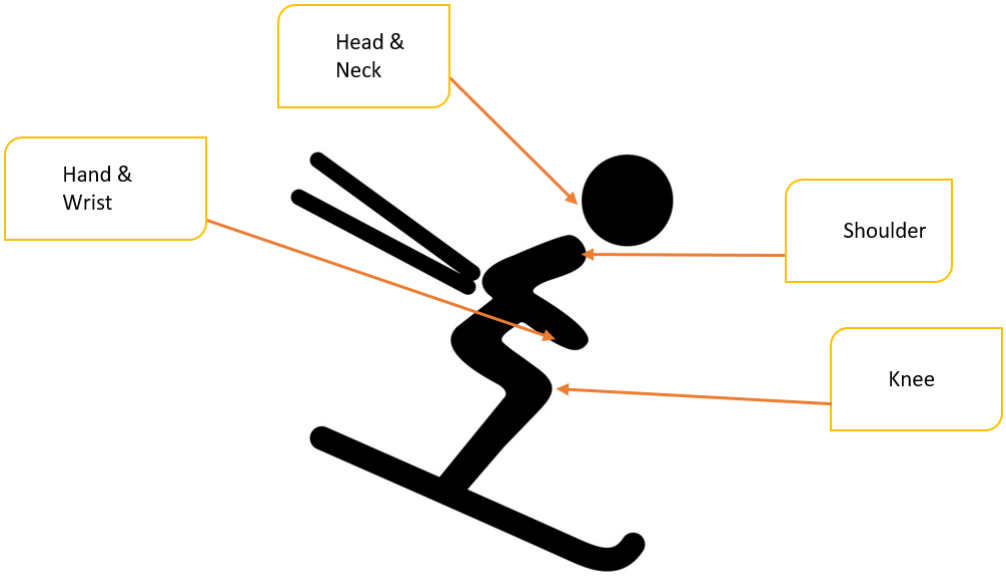
Sample Cool-Down 2:	
Low Intensity:	○ Brisk walk 5-10 minutes on a flat area
Stretching: 30 seconds each	○ Hamstring Stretch ○ Quadriceps Stretch (Flexibility Level 2 – Fitness Cards) ○ Crossed Leg Hip Stretch (Flexibility Level 5 – Fitness Cards) ○ Butterfly Stretch (Flexibility Level 3 – Fitness Cards) ○ Triceps Stretch (Flexibility Level 3 – Fitness Cards)

Coaches' Notes:

- Think about the stretches that might be easier to do in your particular setting. There are modifications to most stretches in order to do them standing, seated or laying down.
- Develop a standard routine for your cool-down. Not only will it provide an opportunity for you to review the session or provide suggestions leading into the next practice, it will also create a routine you can suggest your athletes to do at home.
- Observe how your athletes are stretching. Ballistic or 'bouncing' movements while stretching can cause injury. Stretching may feel a bit uncomfortable but should not be painful.
- Use the time at the end of practice to encourage healthy habits at home.

Alpine Skiing-Related Injuries

Injuries are problems for athletes in all sports, at all levels. It is beneficial for coaches to be aware of common injuries that athletes could experience in their sport.



The graphic above highlights five of the most common injury sites for alpine skiers. Of these injury sites, the knee is likely to be the most common site. It is important to note that skiing is a sport where environmental conditions and falls cause many injuries. Fall risks may also be higher when athletes are learning the sport and gaining balance. **Any injuries that athletes happen to obtain during SO training should be immediately tended to by a healthcare professional** (doctor, nurse, and physiotherapist). If an athlete reports to you with signs or symptoms of any form of injury it is recommended to send them to a healthcare professional.

Appropriate warm-ups and cool-downs can help to reduce the risk of both acute and overuse injuries specific to alpine skiing. Additionally, strength and flexibility training either in practice or at home can further prevent injuries and improve performance. Specifically, quadriceps, glutes and hamstring strength and flexibility should be a main focus when trying to prevent injuries.

Balance and agility exercises should also be a priority in any alpine skier's training plan. Increased balance levels will allow athletes to be more comfortable and confident, and maintain the correct form even as they get fatigued. This may reduce fall risks and the injuries associated with falls. Similarly, improved agility will improve the athlete's ability to react to the fast shifts and changes of the slopes, decreasing their risk for falls.

Alpine Ski Specific Physical Conditioning

Physical conditioning is the improvement of physical health through programmed exercises. Alpine ski specific conditioning is the use of exercises specifically related to the movements used by players to develop alpine ski specific fitness. The main components of physical conditioning are cardiovascular endurance, muscular strength and endurance, flexibility, and skill development. A successful conditioning program can be accomplished with very little equipment through bodyweight exercises, jumping drills, etc. Some teams may also like to incorporate equipment like resistance bands, weights, stretching straps.

In alpine skiing, these components can be developed on-snow or on dry land through various exercises, activities and drills. . A combination of *on-snow* and *dry land* conditioning is optimal for an alpine skier's performance.

On-Show Conditioning:

On-snow conditioning is one conditioning option for coaches for their athletes as replicates what athletes will do while alpine skiing. Examples of *On-Snow* conditioning are:

- Repetitive, Long Ski Runs – Directed in Purpose
    - Short radius turns, long radius turns, combination
- Alpine Race Training
- Alpine Ski Races
- Alpine Technical and Tactical Drills

Dry Land Conditioning:

Dry Land conditioning involves building up strength, endurance and flexibility in the muscles that will be used the most while snowboarding. This can be done through a variety of methods using bodyweight exercises, those with added resistance, or sport-specific movement patterns. Basic skills such as stance, balance and rotation should also be a focus of dry land conditioning.

Examples of *Dry Land* conditioning are:

- Core strength exercise
    - Plank hold/side plank
    - Leg raises
    - Curl ups
- Bodyweight strength exercises
    - Push ups
    - Squats
    - Wall Sits
    - Lunges – Forward and Lateral
    - Calf Raises
    - Burpees
- Alpine Skiing Basic Skills
    - Stance and Weight Distribution

- Balance and Rotation
  - Single Leg Stance
  - Tandem Stance
  - Narrow Base Torso Twists
- Agility
  - Side to Side Bouncing
  - Agility Ladders

Fitness Resources

Fitness for coaches link.

In addition to the Fit 5 Guide and other resources available online, Special Olympics also offers online Fitness specific courses where coaches can learn more about Fitness, SO athletes, and how the two work together!

The courses include:

- Fitness for the Sport Coach
  - This module is designed to provide Sport Coaches with information that will help them to introduce fitness into their ongoing sport program.
- Fitness Coach Online Training
  - This module is designed to provide volunteer Fitness Coaches with information that will help them to be effective at engaging our athletes in fitness.

Head coaches could consider bringing in a coach to work specifically on fitness relevant to their sport (fitness coach), or they could utilize their assistant coach and have them trained up on the online courses to gain a greater knowledge of fitness and take the lead on fitness training for their athletes. Either way, we would encourage head coaches to use the online learning modules as a way of improving their knowledge and understanding of fitness.

Check out learn.specialolympics.org to find these courses, along with many other available courses, and get learning today!

Sports Psychology

What is Sports Psychology?

Sports Psychology is a name given to a topic that includes many different areas related to sports performance. These include (Association, American Psychological, 2021):

- Goal setting;
- Imagery and performance planning;
- Athlete motivation
- Handling disappointment and poor performance.

Ultimately, Sports Psychology relates to how an athlete's mindset assists or hinders their athletic performance, be that training, competition, or recreationally.

As a coach, your role is to assist an athlete to perform at their best – this includes psychologically as well as physically. This section will briefly discuss a number of Sports Psychology concepts that will assist you in your coaching of Special Olympics Athletes.

For further information on the topic, it is recommended that you explore expert research on the topic such as academic articles, online learning courses, podcasts, and books.

Key Areas of Sports Psychology:

Motivation:

What is motivation?

Often we consider motivation to be making that last lift in the gym, doing that last run up the hill, and going out to win in the final of a competition. However, these are only a select few examples. Most of the time motivation can be; going to training, sticking to your exercise routine, or drinking all of your water for the day.

Motivation is goal-dependent. This means that each person will have different motivation because each person will have different goals.

According to Burton and Raedeke in *Sport Psychology for Coaches* (2008), great coaches know that they don't give athletes motivation. Rather, they create the conditions or team climate in which athletes motivate themselves. Coaches do this by recognizing the importance of intrinsic and extrinsic motivation.

Intrinsically Motivated Athletes participate for the love of the sport. They enjoy the process of learning and mastering difficult sport skills and play for the pride they feel when working hard toward accomplishing a challenging goal.

Extrinsically Motivated Athletes participate in sport in order to receive praise, to win, or to avoid punishment. The process is often not as enjoyable, they don't enjoy completing difficult tasks and often results in sport drop-out down the line.

Extrinsic motivation can also be useful in assisting athletes to learn a skill or try a new task. Using praise as a motivator can help to encourage athletes to explore or complete a task they normally would not attempt. However, extrinsic motivation should not be used long-term, and should be phased out over time if it is being used to help motivate athletes to complete tasks.

For example, a golfer does not like hitting the ball out of long grass and is willing to take a shot penalty to move the ball. Encourage the athlete attempt the shot out of the long grass and praise them for their effort. Over time, as the athlete becomes more comfortable performing the shot and continues to hit the ball out of the long grass, praise should be reduced.

Special Olympics carried out an Athlete Satisfaction Survey. This survey aimed to find out why athletes participated in Special Olympics sports and their motivation to do so. The results can be seen in the pie chart below.

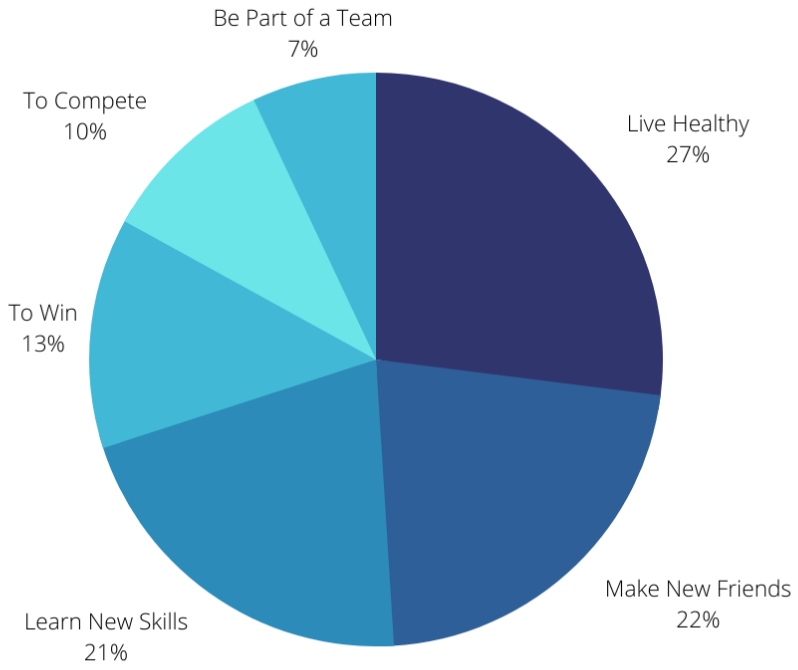


Figure ii: Athlete Satisfaction Survey Results - Why athletes participate in Special Olympics Sport. These can be considered to be sources of motivation for athletes and should be considered in your decision making as a coach

Motivation Myths:

Motivation Myth 1: Athletes are either motivated or not motivated

Some coaches believe that motivation is simply a personality trait, a static internal characteristic. They believe that an athlete either has motivation or doesn't. They don't believe motivation is something coaches can develop. For these coaches, the key to having a motivated team is to find and recruit athletes who have the right personality. However, while some athletes are, in fact, more motivated than others, this view does not provide any direction or guidance on how coaches can help develop and sustain athletes' motivation. The fact is, coaches can help athletes develop motivation.

Motivation Myth 2: Coaches give athletes motivation

Other coaches view motivation as something they can inject into their athletes on demand, like a flu shot, by means of inspirational pep talks or gimmicks. They may use slogans, posters, and bulletin board quotes from upcoming opponents. These strategies may be helpful, but they are only a small piece of the motivation puzzle. There is much more to the story—motivation is not something coaches can simply give their athletes.

Motivation Myth 3: Motivation means sticks and carrots

Some experts suggest that effective motivation means using carrots (rewards) and sticks (punishments) to drive athletes to do things they would not do on their own. This may seem innocuous, but think about it on a deeper level. It assumes that athletes don't want to do something, so the coach will provide motivation to make them do it through punishments or rewards. Coaches who emphasize the stick, in the form of chastising, criticizing, yelling, coercing, and creating guilt, often find themselves swimming upstream. No matter what they try, they meet resistance and negative attitudes. Not only is this approach ineffective, it saps the enjoyment out of sport. Coaches must understand athletes' needs in order to create a team culture that naturally motivates them.

Confidence (through Goal Setting)

Sports confidence is the belief in yourself to execute or complete a task or skill relevant to the sport or activity you are participating in. Sport confidence should be gained through consistent execution of the skill or task in a controlled environment (training session). This can then be applied in a more chaotic environment (competition). For example; Maureen is confident she can complete the 100m breast stroke in her local competition because she has completed this particular stroke many times in her training.

An athlete with lack of self-confidence doubts whether they are good enough, whether they have the qualities necessary for success (Plakona, Parčina, Ludvig, & Tuzović, 2014).

1. Developing sport confidence in athletes helps to make participation fun and is critical to the athlete's motivation.
2. A considerable amount of anxiety is eliminated when athletes know what is expected of them and when they have to be prepared.
3. Mental preparation is just as important as skills training.
4. Progressing to more difficult skills increases the challenge.
5. Dropping back into easier skills increases one's confidence.

Developing Self-Confidence through Goal Setting

Realistic yet challenging goals for each athlete are important for the motivation of the athlete, during both training and competition. Accomplishing goals at practice through repetition in settings that replicate the competition environment instill confidence. Sport confidence in athletes helps make participation fun and is critical to the athlete's motivation. Setting goals is a joint effort between athletes and coaches.

Goal setting must be a collaborative effort. At the end of the day, the goals are set for the athlete for what they want to accomplish, not what their coach, parents, friends, or family want them to accomplish. A coaches' role is to assist the athlete is creating the goals that align to their desires, and to keep the athlete on track to achieve those goals.

Goals should be:

1. Structured as short-term, intermediate and long-term.
2. Viewed as stepping stones to success.
3. Created and accepted by the athlete.
4. Used to establish the athlete's training and competition plan.
5. Flexible
6. Written down
7. Identified as either performance goals or practice goals
8. Achievable - Sometimes athletes will need to seek support to accomplish their goals

Following the SMART Goals model is a simple way to set goals for your athlete in a collaborative and logical way.

Handling Disappointment (performance/success oriented/injuries)

Disappointment can present itself in many different ways for an athlete. This can be:

- Poor/Below expected performance (in training or competition)
- Good performance without the desired outcome (winning/scoring/placing)
- Disappointment for others (teammates/friends)
- Acquiring an injury (meaning inability to compete/perform)
- Not receiving praise (from coach/friend/family)

And many more reasons!

As a coach, it is essential that you assist your athletes in handling disappointment. Not only is this beneficial to them in sport, it is a life skill that can be applied in almost any other context (such as job applications, studying for school/college, acquiring an illness, etc.).

How disappointment can be seen in athlete behaviour:

- Anger
- Frustration
- Going within themselves
- Feeling overwhelmed (tears)
- Loss of focus
- Loss of motivation to train/compete
- Loss of interest in the sport

Disappointment often presents itself as stress in athletes. Special Olympics offers the Strong Minds program to assist athletes in learning how to cope with stress. This can be stress from competition or the stress that comes from daily tasks.

Check out the Strong Minds page for all resources required.

A useful tool for coaches working with athletes showing signs of stress would be the Strong Minds Coach's Playbook. These strategies can help athletes with the stresses of life and sport, and promote healthy thoughts and coping mechanisms.

Strong Minds Tips for Stress

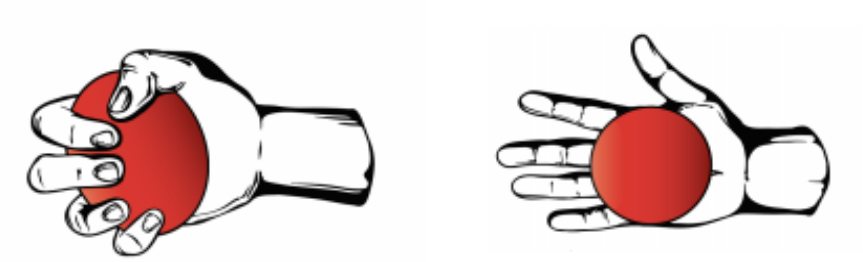
Coach's Playbook

Special Olympics
Strong Minds

Strong Minds is an interactive learning activity focused on developing adaptive coping skills. Competition provides a natural opportunity to develop active strategies for maintaining emotional wellness under stress, such as: thinking positive thoughts, releasing stress and connecting with others. During Strong Minds, your athletes will learn the following strategies and will benefit greatly if you can incorporate these strategies into practice and games.

Station 1

1. Squeeze the ball for 3 seconds.
2. Release the ball and any tension.

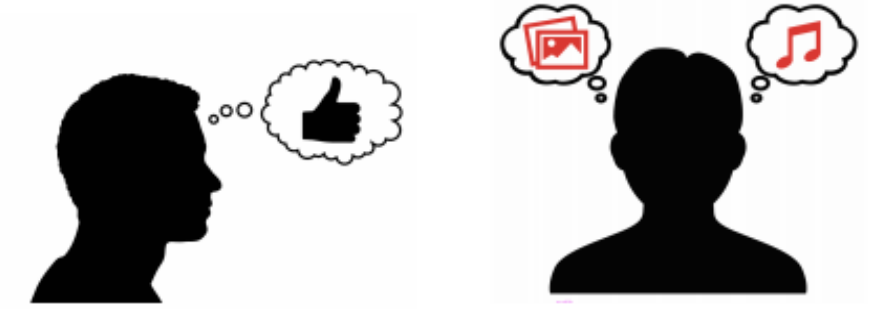


Coach Recommendations

- On the way to a game or competition
- During a pre-game team talk
- After the game during a team talk
- For an athlete sitting on the bench or in between turns/games

Station 2

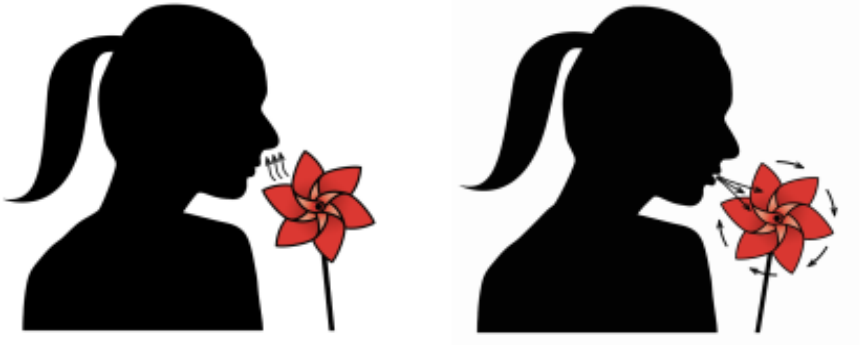
1. Think a good thought.
2.



- During practice and games, state positive statements to athletes
- Start practices with a song with a positive message
- Ask an athlete to start each practice with a positive statement to the team
- After the game, ask the athletes what went well

Station 3

1. Smell the flower [pinwheel].
2. Blow the flower [pinwheel].



- Encourage deep breathing during stretching
- Teach the athletes to use deep breathing during a stressful situation in a game (ie. Before shooting a foul shot).
- Before a game, do a few rounds of deep breathing as a team

Strong Minds Tips for Stress

Coach's Playbook

Special Olympics Strong Minds

Station 4

1. Try a few stretches

2. How do you feel?

- Make sure athletes hold static stretches for at least 30 seconds
- Incorporate deep breathing into stretching routines
- Lead stretches that also focus on relaxation
- Encourage athletes to do a few stretches before they go to bed each night

Station 5

1. Support others

2. Seek support from others

- Set up drills for partner work to allow athletes to build connections
- Encourage athletes to use positive messages to teammates during practices and games
- Remind athletes that their coach and teammates are there to support them
- Encourage family members to also incorporate these strategies with their athletes

Station 6

1. Pick the strategies you like

2. Use the strategies in everyday life

- Encourage athletes to visit Strong Minds at Healthy Athletes or Game Ready Minds at Performance Stations
- Remind athletes who visited Strong Minds to utilize the skills they learned in practice and games
- Ask the athletes to practice these strategies at home

This Strong Minds Tips for Stress concept was created by Special Olympics Texas

Communication strategies by the coach, fellow athletes, families and friends will help an athlete handle disappointment. Listen to what the athlete says and why they may be disappointed. Offer positive switches – positive comment – correction – positive comment to take the athlete's attention away from their disappointment. The athlete's effort, attitude and preparation should be emphasized, not the result of the competition.

Athletes in Training

Self-Talk & Imagery

Self-talk represents the things you say in your head about yourself.

Self-talk can sometimes be negative e.g., “that team is much better than ours”.

Positive self-talk involves repeating a helpful and positive word or phrase such as “I am fit and ready to play”.

Imagery or visualization is a mental process. It allows you to simulate (imagine) experiences in your mind. Often these experiences have the desired outcome e.g. scoring a penalty kick in football.

Imagery also involves using your senses (smell, sound, taste, touch, and feeling) to create an accurate experience in your mind.

Positive self-talk and imagery promotes confidence and success. Coaches should help educate their athletes on the value of positive self-talk and imagery.

One thing coaches can do is help athletes establish a pre-performance routine. At the start of a competition athletes can very briefly (10-15 seconds) do 4 helpful steps:

1. Close your eyes
2. Take a few deep calming breathes
3. Repeat a positive phrase “I am ready”
4. Picture yourself successfully making a perfect start, or finishing strongly.

This routine can be created and modified at training. Find what works best for the athletes. Take this pre-performance routine into a competition to help athletes best prepare mentally.

Athletes at Competition

Psychological Preparation

Just as you train your athletes physically and tactically for competition, you equally need to prepare them psychologically.

Physical Readiness + Psychological Readiness = Competition Readiness

Readiness of the athlete means being focused and prepared for competition.

- Psychological Readiness: Being a participant in the sport, showing confidence and an understanding strategy.
- Physical Readiness: Being physically conditioned and trained in the skills required for competition.

How to Psychologically Prepare for Competition:

1. Create and Set Competition Goals
2. Prepare for competition setting
    a. Tell your athletes what to expect
    b. Use videos of previous competitions
    c. Have experienced athletes speak with inexperienced athletes
    d. Have all equipment ready and available before time
3. Train as you plan to compete
    a. Make sure training is properly preparing your athletes for competition
    b. This will give athletes confidence going into competition performance
4. Practice Strong Minds Stations

Anxiety or stress is normal before a competition. Athletes who do not suffer from some sort of anxiety or stress before performance would be in the minority.

Competition anxiety occurs when an athlete perceives a competitive situation as potentially threatening, resulting in an aversive emotional response (Schaefer, Vella, Allen, & Magee, 2016). Although some level of competition anxiety is considered to be normal, when competition anxiety exceeds a threshold level it can become

detrimental to performance, motivation, and enjoyment (Schaefer, Vella, Allen, & Magee, 2016).

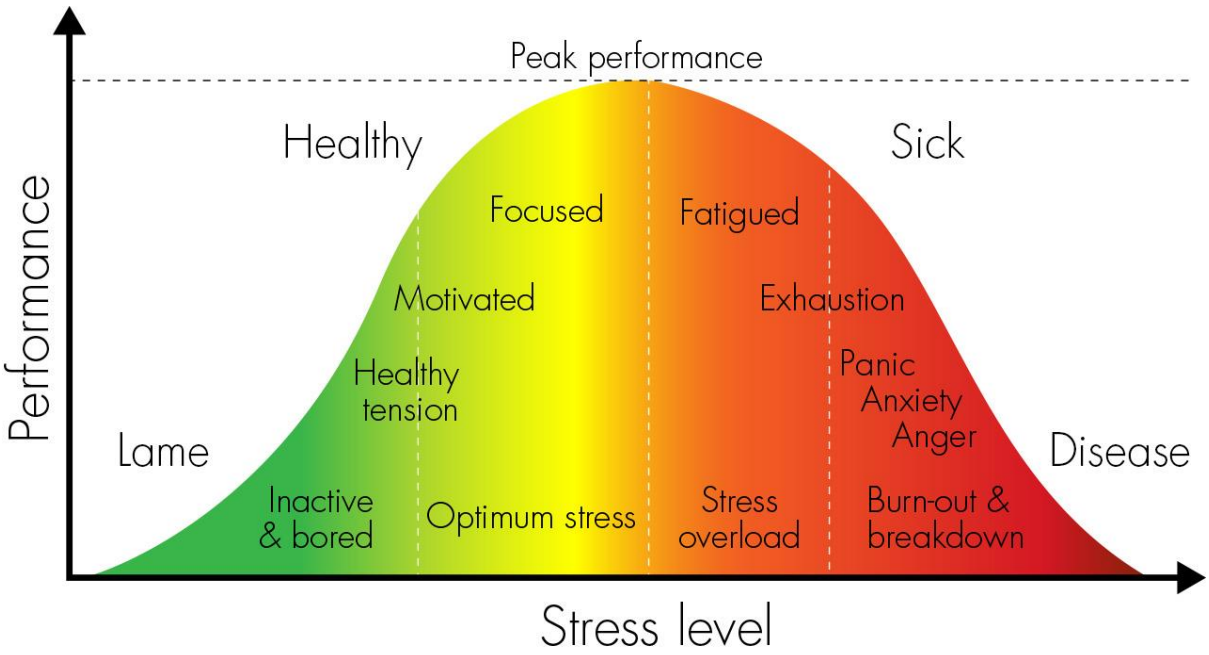


Figure ii: The relationship between stress level and performance. This graph shows where peak performance can be achieved with a moderate stress level. It also shows the dangers of high stress and anxiety. Credit cescasdestinationhealthy.wordpress.com for image.

As a coach, it is your role to assist your athlete in not exceeding this anxiety threshold.

Simple measures such as:

1. Pre-Performance Routine
2. Strong Minds Stations
3. Alternative tasks to take their mind off of the competition/performance

These measures can be beneficial in the psychological preparation for athletes before competition.

There can be times when anxiety becomes too much for an athlete. They may not want to train or compete. The idea of competition or performing will cause them serious stress. If this is noticeable for an athlete within sport and outside of sport (social life, education, family life, etc.), it is recommended that the athlete talk to a professional. This can be a family doctor, a counsellor, or a psychologist.

Post-performance psychology

What is success – individual to the athlete

Many athletes will equate winning and losing with success and failure. This is often a self-defeating perspective as athletes only partly control the outcome of competition and often winning is unrealistic.

Coaches should focus on individual effort, self-improvement and learning as barometers of success.

Each athlete will have their own take on what success is to them.

If an athlete feels they are unsuccessful at a competition:

- ✓ Reassure them that winning isn't everything
- ✓ Refer back to the athlete's goals
- ✓ Identify where they have achieved or progressed towards their goals
- ✓ Praise their effort, not performance
- ✓ Remember the Special Olympics athlete oath;
  "Let me win. But if I cannot win, let me be brave in the attempt."

How to win & lose – code of conduct

All athletes should follow the Sportsmanship section of the Special Olympics Athlete's Code of Conduct.

- I will practice good sportsmanship.
- I will act in ways that bring respect to me, my coaches, my team and Special Olympics.
- I will not use bad language.
- I will not swear or insult other persons.
- I will not fight with other athletes, coaches, volunteers or staff.

As a coach, your role is to remind the athletes of their conduct and how to manage themselves win, lose, or draw. The important thing to do when educating athletes on their code of conduct is to explain 'why'.

Explain that athletes should act in the same manner they would want others to act if they were in the same position. If an athlete is successful, congratulate them. If an athlete is unsuccessful, encourage them for next time.

Your role as a coach is to be a role model to your athletes. You should always demonstrate good sportsmanship throughout competition, training, or events. Athlete's often 'feed' off of their coach's energy and enthusiasm – make sure yours is always positive and following good etiquette.

Figure iii: Some roles a coach may take on in addition to being a role model.

Athletes in a heightened state of anxiety post-performance

Can be after achieving success (over-excitement) or not achieving desired outcome (disappointment).

If an athlete is excited and celebrating, do not discourage this! This is the feeling we all long for as athletes, coaches, and fans! Help the athlete to celebrate in a positive and safe manner.

It is important to not discount feelings of disappointment. It is appropriate to be disappointed when we lose a game or match. The challenge for the coach is to redirect that disappointment into a renewed commitment to training for the next competition or season. Becoming obsessed with losing is not a healthy or natural reaction for anyone.

Here are some strategies for athletes experiencing heightened states of anxiety:

1. Use Strong Minds stations
    a. Positive Messaging
    b. Deep Breathing
    c. Stretching
2. Offer support – through hi-fives, knuckle touches, other forms of comfort that the athlete is accepting of and comfortable with
3. Have a consistent post-performance routine (win, lose, or draw)
    a. Stretching
    b. Debrief
    c. Praise for effort

All athletes are different and will have different ways of coping. Work with your athlete what their best post-performance routine should be and when to carry it out.

For some, shortly or immediately afterward is appropriate. If you leave it too long, it becomes forgotten.

For others, they may need more time to decompress – there is no one size fits all.

The athlete's effort, attitude and personal skills attainment should be rewarded and positively reinforced.

Educating Athletes

Each athlete is different. Simple guidelines and strategies on how to educate athletes will not be universally applicable to athletes. However, having a knowledge of the foundations as listed above will help you to best prepare your athletes for training and competitions.

Some simple tips for educating athletes about sports psychology are:

1. Introduce elements bit by bit
    a. Start with goal setting
    b. Strong Minds stations
    c. Introduce pre-performance routines
2. Use sporting examples to explain elements of psychology
    a. Confidence
    b. Disappointment
3. Work in groups
    a. Have open discussions about elements before, during, and after training and competition

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The Role of the Coach

For more information on your role as a coach, read our Special Olympics supplement available here:

Teaching Alpine Skiing Rules

The best time to teach the rules of Alpine skiing is during practice. Please refer to the official Special Olympics Sports Rules for the complete listing of Alpine skiing rules. As a coach, it is your responsibility to know and understand the rules of the sport. It is equally important to teach your athletes the rules that enable them to compete in Alpine skiing. A coach must maintain current copies of the Official Special Olympics Sports Rules and also The International Ski Federation - Fédération Internationale de Ski (FIS) ICR (The International Ski Competition Rules) which can be found at https://www.fis-ski.com/.

Divisioning

It is important that you as a coach learn and understand the rules and procedures of divisioning before attending competitions. Understanding the divisioning process will have a direct impact on your athlete's performance. The fundamental difference between Special Olympics competitions and those of other sports organizations is that athletes of all ability levels are encouraged to participate, and every athlete is recognized for his/her performance. Competitions are structured so that athletes compete with other athletes of similar ability in equitable divisions. Historically, Special Olympics has suggested that all divisions be created so that the variance between the highest and lowest scores within that division does not differ by more than 10 percent. This 10 percent statement is not a rule but should be used as a guideline for establishing equitable divisions when the number of athletes competing is appropriate.

Coaches are critical in helping competition management teams make divisioning work. Divisioning works best when coaches submit preliminary scores. This helps athletes get into the proper division as well as gain additional competition experience.

How Divisioning is Implemented

An athlete's ability is the primary factor in divisioning Special Olympics competitions. The divisioning of an athlete is determined at the competition. Divisioning is determined by gender, age and ability. Alpine skiing uses the following two-stage process:

Stage1: Determining appropriate ability levels (Beginner, Novice, Intermediate and Advanced)

A visual assessment by a knowledgeable Special Olympics race official in the competition venue based on the pre-registered ability level of each athlete.

The fastest clean timed run (no Disqualification- DQ) determines the athlete's ability level.

An athlete may be moved from his or her pre-registered ability level, without a fastest clean timed run, at the determination of the knowledgeable Special Olympics race official.

Note: Once an athlete is in the appropriate ability level, as determined by the knowledgeable Special Olympics race official, progress to Stage 2 for determining appropriate divisions.

Stage 2: Determining appropriate divisions

- Gender
- Age
- Ability level as determined in Stage 1

Note: It is recommended whenever possible that athletes be divisioned in each discipline (10-Meter Walk, Glide, Super Glide, Slalom, Giant Slalom and Super-G) being held at the competition. If time constraints don't allow this, it is recommended that the athlete is divisioned in Giant Slalom.

Ideally, competition is enhanced when each division accommodates three to eight competitors of similar ability. In some cases, the number of athletes within a competition will be insufficient to achieve this goal.

Protest Procedures

Protest procedures are governed by the rules of competition and may change from competition to competition. Only rules violations can be protested. Judgment calls made by officials or divisioning decisions cannot be protested. The protest must be written, site a specific violation from the rules and state why the coach feels the rule was not followed.

Check with the competition team prior to a competition to learn the protest procedures for that competition. The protest period is time sensitive. Coaches should be aware of the impact on their athletes and competition time schedule.

The role of the competition management team or jury is to enforce the rules. As a coach, your duty to your athletes and team is to protest any action or events while your athletes are competing that you think violated the official Alpine Skiing Rules. It is extremely important that you do not make protests because you and your athlete did not get your desired outcome of an event. Filing a protest is a serious matter that may impact a competition.

Divisioning

Alpine Skiing Protocol & Etiquette

The following are rules that are to be applied to all people on the slopes:

- Always stay in control and be able to stop or avoid other people or objects.
- People ahead of you have the right of way. It is your responsibility to avoid them.
- You must not stop where you obstruct a trail or are not visible from above.
- Whenever starting downhill or merging into a trail, look uphill and yield to others uphill from you.
- Always use devices to help prevent runaway equipment.
- Observe all posted signs and warnings. Keep off closed trails and out of closed areas.
- Prior to using any lift, you must have the knowledge and ability to load, ride and unload safety.

During Training

For Coaches

- Arrive at training facility 15 minutes before the scheduled start time.
- Come prepared to coach. Know and understand the rules.
- Ensure that athletes are wearing appropriate clothing and have proper equipment before training begins.
- Ensure that athletes participate in warm-ups, stretching and drills.
- Have a copy of an up-to-date medical for every athlete.
- Treat all athletes in the same manner.
- Speak calmly when giving instructions or corrections.
- Call Alpine skiers by their first names.
- Answer the athletes' questions in a respectful and reassuring tone.
- Treat others as you would wish to be treated: Please be considerate of other skiers and/or snowboarders on the hill.
- Set rules and expectations for all athletes and coaches.
- Respect nature: Don't throw trash on slopes; don't ski in closed areas.

For Athletes

- Come prepared and on time to training.
- Notify coach if not able to attend training.
- Wear appropriate clothing and have proper equipment.
- Give your best effort.
- Treat others as you would wish to be treated: Please be considerate of other skiers and/or snowboarders on the hill.
- Notify coach of illness or injury.
- Be supportive of your fellow athletes.
- Respect nature: Don't throw trash on slopes; don't ski in closed areas.

During Competition

For Coaches

- Know where athletes are during the competition.
- Get score sheets and other paperwork done on time or early.
- Review all competition rules and procedures.
- Attend all coaches' meetings.
- Encourage your athletes to compete to the best of their ability at all times.
- Practice the Honest Effort Rule.
- Ensure that athletes are wearing appropriate clothing and have proper equipment before competition begins.
- Ensure that you are properly prepared by having the following:
    - Start lists
    - Bibs
    - Competition schedule
    - Radio/ cell phone
    - Lift tickets
    - Emergency/ Injury Plan
- Have a copy of an up-to-date medical for every athlete.
- Treat all competition staff with respect. Remember, they are also volunteers.
- Maintain a calm demeanor throughout the competition.
- Never use foul language or raise your voice in an angry tone.
- Thank the competition staff and officials.
- Set rules and expectations for all athletes and coaches.

For Athletes

- Come prepared and on time.
- Notify coach if not able to compete.
- Wear appropriate clothing and have proper equipment.
- Give your best effort.

Sportsmanship

Good sportsmanship is both the coach's and athlete's commitment to fair play, ethical behavior and integrity. In perception and practice, sportsmanship is defined as those qualities which are characterized by generosity and genuine concern for others. Below we highlight a few focus points and ideas on how to teach and coach sportsmanship to your athletes. Lead by example.

Competitive Effort

- Put forth maximum effort during each event.
- Practice the skills with the same intensity as you would perform them in competition.

Fair Play at All Times

- Always comply with the rules.
- Demonstrate sportsmanship and fair play at all times.
- Respect the decision of the officials at all times.

Expectations of Coaches

1. Always set a good example.
2. Instruct participants in proper sportsmanship responsibilities and demand that they make sportsmanship and ethics the top priorities.
3. Respect judgment of contest officials, abide by rules of the event and display no behavior that could incite fans.
4. Treat opposing coaches, directors, participants and fans with respect.
5. Develop and enforce penalties for participants who do not abide by sportsmanship standards.
6. Demonstrate a high standard of sportsmanship.

Expectations of Athletes

1. Treat fellow competitors with respect.
2. Encourage competitors when they make a mistake.
3. Respect judgment of officials and abide by rules of the competition.
4. Accept seriously the responsibility and privilege of representing Special Olympics.
5. Define winning as doing your personal best.
6. Live up to the high standard of sportsmanship established by your coach.

Remember

- Sportsmanship is an attitude that is shown by how you and your athletes act on and off the slopes.
- Be positive about competing.
- Respect your opponents and yourself.
- Always stay under control even if you are feeling mad or angry.

Alpine Skiing Glossary

Term	Definition
Aerobic Training	Training to improve the cardiovascular (oxygen transport) system. Exercise sustained for three minutes or longer. It is the fundamental basis for most forms of physical conditioning; examples are running, hiking and bicycling.
Alpine Racing Disciplines	10-Meter Walk, Glide, Super Glide, Slalom, Giant Slalom and Super G events.
Anaerobic Training	Training to improve the body's energy system that functions at a level of intensity so high that oxygen can no longer be converted to energy rapidly enough; thus the body must rely on stored energy. Requires a maximal effort of up to one minute duration. Examples are slalom skiing, sprints and athletics.
Angulation	Creating lateral angles with the knees, ankles, hips and upper body to balance or turn on an edged ski.
Arc	The track of a turn remaining on the snow.
Banking	Inclining or leaning the entire body to put the ski on its edge.
Bi-ski	A bucket suspended over two skis, in which the athlete, without use of his/her arms and legs, sits. A bi-ski may be tethered by a qualified stand-up skier.
Carved Turn	A turn where the tail of the ski follows in the track of the tip of the ski.
Center of Mass	That point of the body where, for analysis of the dynamics of movement, all of the body's mass may be considered to reside. Usually this point is in the region of the navel; as the body flexes and assumes different postures, the center of mass moves around. Also called center of gravity.
Christy Turn	A turn during which the skis skid at the same time on corresponding edges. (Corresponding means either both left or both right edges, as viewed by the skier.)
Counter Rotation	The movement of twisting the torso and legs in opposite directions concurrently.
Cross-Over	Moving the body's center of mass forward and over the skis in the direction of the new turn.
Crud	Varied snow conditions that exist on tracked powder snow or ungroomed spring snow.
DIN	The setting on your ski bindings that indicates the force required to release the your ski boot.

DNF	Did Not Finish
DNS	Did Not Start
DSQ or DQ	Disqualified
Edging	Placing the edge of the ski at an angle to the snow surface.
Extension	Any movement resulting in an increase of a joint angle (i.e., the angle between two adjacent parts of a limb).
Fall Away Turn	Turns made on a side hill.
Fall Line	The imaginary line down a slope, where gravity and terrain would allow a ball to roll down the hill. Skiers achieve their greatest speed when in the fall line.
FIS	The abbreviation for Federation International de Ski, the organization that regulates all international amateur ski competition.
Flex Pole	A plastic gate that is hinged at snow level.
Flexion	Any movement resulting in a decrease of a joint angle.
Fundamentals	Basic components of good skiing.
Footbed	An insole or orthotic placed inside a ski boot that helps to align the foot, ankle, knee and hip for a balanced stance.
Forerunner	A skier who skis a race course before the competitors do, in order to determine if the course is safe and ready for competition.
Garland	A series of short turns across a hill in one direction.
Gate	The first and last gates for slalom racing are full gates and made up of two slalom poles. The athlete will ski over the imaginary line between the two poles (gate). All other slalom turns are made around one pole, which is considered the gate. For GS and Super G two pairs of slalom poles hold panels that establish the gate. The athlete skis over the imaginary line between the two panels.
Glide	Skiing on as flat a ski as possible.
Groomed	Snow that has been mechanically prepared.
Guide	A trained skier who communicates information to a visually impaired skier.
Inclination	Banking or leaning the entire body to put the ski on its edge.
Initiation Phase of a Turn	The movement in the direction of a new turn that prompts edge change.
Inside Ski	The ski closest to the center of the turn.
Isometric Exercise	Muscle contraction using resistance and no joint movement.
Isotonic Exercise	Dynamic muscle contraction involving joint movement; i.e., calisthenics.
Jury	The officials principally responsible for ensuring that the race is fair and safe for all competitors.
Line	The path taken through the gates.

Long Radius	Turns as in Giant Slalom and Super-G.
Mono-ski	A bucket suspended over one ski, with a shock absorbing system, in which the athlete, without use of his/her legs, sits.
Open Gate	A gate that is set horizontal to the direction of the course.
Outrigger	A crutch type support (also known as a "Canadian Crutch'") with a small ski on the end, for skiers needing additional support for balance.
Outside Ski	The ski farthest from the center of the turn.
Pole Plant	Used as a timing device in a turn.
Pressure	Management of the appropriate weight distribution on the ski.
Race Line	The fastest path taken through the gates.
Referee	A member of the jury.
Rise Line	The imaginary line, in the fall line, above the turning pole in a race course; it is used by coaches to determine turn shape.
Rotation	Lower body function of the legs and feet that determines the turn shape appropriate to the terrain.
Short Radius	Small turns as in slalom turns.
Side Cut	The design of a ski in which the waist (middle) of the ski is narrower than the tip and the tail.
Sideslipping	The movement of parallel skis sliding perpendicularly down the hill by releasing the edges and flattening out the skis.
Skidded Turn	A turn where the tail of the ski does not follow in the track made by the tip of the ski.
Ski Flex	The bending of an edged and pressured ski.
Slalom	A race in which the athlete skis through the first gate (full gate), skis around single slalom poles until the last gate; then finishes the race skiing through the last gate (full gate) and into the finish area.
Snowplow Turn	See Wedge Turn.
Speed Events	Downhill or Super G.
Start Wand	The device in the starting gate that is located about knee level that activates the timing equipment.
Static	Skiing position that lacks movements.
Stubbies	Cut-off slalom or flex poles used for training drills.
Tactics	The line chosen to ski through a gate or over varying terrain.
TD	Abbreviation for Technical Delegate, who is the head of the jury. This person makes certain that the race is safely and properly conducted.
Technical Events	Slalom or Giant Slalom.
Technique	The choice made among the movement options available to accomplish a given goal.
Tether	A ropelike restraint used as a safety measure. The action of managing a skier with a 12- to 20-foot line.

Terrain Course	A course designed to have many of the terrain components found in free skiing, such as bumps, rolls, jumps, ducking poles and offset ripples.
Traverse	Skiing across the hill from one side to the other on an edged ski.
Tuck	The aerodynamic position that Downhill and Super G racers use to achieve more speed.
Turning Pole	In a gate, the inside gate pole around which the racer skis.
Wax Room	A place set up by coaches and parents where athletes can work on their skis.
Wedge	A position of the skis on the snow where the tips are close together and the tails are fanned out.
Wedge Turn	Also called the snowplow turn. Its an elementary turn with the skis in a wedge position where the tips of the skis are closer than the tails.