

THE BENEFITS OF ALPINE SKIING

Skiing and ski racing for Special Olympics athletes is meant to be fun and rewarding. It brings people together from many professions, it brings families together to share a lifetime sport, and it offers many of our Special Olympics athletes and coaches the opportunity to participate in a winter sport training and competition program. Alpine Skiing keeps athletes in shape for summer Special Olympics programs such as Cycling, Athletics, and Softball.

A PREVIEW OF THE ALPINE SKIING EVENTS OFFERED

Alpine Skiing competition and training is offered for these ability levels:

- The Beginner Skier
- The Novice Skier
- The Intermediate Skier
- The Advanced Skier

Athletes are classified into these ability levels by simple proficiency tests. An athlete's safety and comfort are primary goals. Once the athlete is classified, training and competition can then begin on race courses and slopes to match the ability levels.

ADAPTIVE SKI INSTRUCTION

In Special Olympics Alpine Skiing programs, a small percentage of our athletes have physical disabilities or limitations which require the need for instruction by qualified adaptive alpine ski instructors. Special Olympics International strongly encourages any program whose athletes qualify for special instruction to ensure that qualified ski teachers are available for all coaches education and training. This is in addition to athlete training and competition.

The United States has very advanced programs for coaches education and certification for adaptive ski teaching. Many other countries have established excellent programs. Please consult the National Handicapped Sports Organization and/or the National Handicapped Skiing Organization for their assistance. Special Olympics is working with National Handicapped Skiing as a resource for coaches education in the United States. They provide alpine certification focusing on teaching progressions in the following areas.

- Sit Ski progression
- Mono Ski progression
- Bi-Ski progression
- Three Track progression
- Four Track progression
- Blind Skiing progression.

PLANNING A TRAINING SESSION

Most skiing exercises work on strengthening the stomach and leg muscles, as well as overall flexibility. Several categories should be considered and incorporated into your fall dry-land training program.

Warm-up

Prior to any work out, muscles need to be warmed up and ready for action. This may be done by biking, jump roping, jogging, or walking.

Stretching/Flexibility

Along with strength and endurance, flexibility is one of the most important parts of every training program. It is important to stretch before and after each training session for at least ten minutes. Be sure to include the muscles of the head, neck, shoulders, arms, waist, hips, upper thighs, calves, ankles, and the back. Proper flexibility programs will help to reduce injuries.

Strength/Power

The exercises used in strength training programs reflect the athlete's need for strength development. A general strength training program gives the athlete extra strength in the muscles that are particularly important to perform an event well. Strength training programs also provide the athlete with a suitable background for participating in a specific strength training program in the future.

Endurance

Endurance is the ability to carry out a given amount of work during a prolonged period of time without deterioration in the quality of such work. Endurance is an important facet of an athletic performance in skiing simply because actions are repeated over and over. Athletes should play hard for 20 to 60 minutes at least two to three times a week. Include activities such as soccer, tennis, biking, swimming, jogging and walking.

Agility/Quickness

Agility and quickness are closely related with coordination, strength, flexibility, and balance. It has been found that strength leads to an increase in the speed of muscle contraction; it has also been shown that there is a correlation between flexibility training and strength training to improve quickness. The ability of the body to change directions quickly and smoothly, while maintaining balance, is very important in ski racing.

Balance/Coordination

Coordination is the ability to perform a skilled movement pattern. For alpine skiers, it is very important to improve eye/foot coordination. Balance is the ability to keep your body in an equilibrium position. In skiing, this position always changes and requires a constant repositioning of the body to get back into balance. Rope walking (on the ground), volleyball, tennis, soccer, and simple gymnastic routines should be implemented here.

DRY-LAND OR PRESEASON TRAINING PROGRAM

Alpine skiing is a very demanding physical sport and athletes must be in top physical condition in order to compete successfully and safely. Physical training and fitness are also the basis for mental toughness and resistance. Additionally, alpine skiing can be practiced and learned more easily if athletes are in top physical form. Injuries, especially in Downhill, can be avoided if the physical condition of the athlete is as sturdy as possible. Slalom requires, in addition to a basic combination of endurance and strength, a high capacity of quickness and action/reaction endurance. Downhill and Giant Slalom events require strength, strength endurance and coordination.

Through proper training, the athlete improves his/her physical, psychological, motor-technical and mental efficiency. In addition, the athlete is prepared through training to realize his/her highest sports performance. To bring the athlete to maximum performance, the coach must design and follow a well-planned training schedule which includes physical challenge through physical exercise and instruction. Training must also include the techniques and tactics of alpine ski racing.

What follows is an introduction to the needs and requirements of the entry level Special Olympics coach in the sport of alpine ski racing.

FIVE UNITS OF PHYSICAL TRAINING FOR ALPINE SKIING

Unit One -- ENDURANCE TRAINING (Aerobic)

Endurance is the ability to carry out a given amount of work during a prolonged period of time without deterioration in the quality of such work. Endurance is an important facet of athlete performance in skiing simply because actions are repeated over and over.

Dryland Training Exercises

1. Long distance runs, 5-7, 6-8, 7-10 minutes with middle range pulse frequency of around 110 beats per minute (BPM).
2. Bike rides, 20 minutes, pulse around 90 BPM.
3. Fartlek runs 8 minutes x 4 repeats

- a) 2 minute walk
 - b) 3 minute jog
 - c) 1 minute run (1 level above jog)
 - d) 1.5 minute jog
 - e) 1 minute walk
4. Interval runs (50 x 5 rest .90 between)
- | <u>Week</u> | <u>Reps</u> | | <u>Distance</u> | <u>Time</u> | <u>Rest Between</u> |
|-------------|-------------|---|-----------------|-------------|---------------------|
| 1 | 5 | x | 50 | .20 | .90 |
| 2 | 7 | x | 50 | .20 | .90 |
| 3 | 9 | x | 50 | .20 | .90 |
- Note: Change any category as progression continues.
5. Water Polo in waist/chest deep water (2 x 8 minute halves)

On-Snow Training Exercises

- 1. Non-stop free skiing (sport-specific tactical training)
- 2. Long and easy giant slalom skiing (no tactical work)
- 3. Free skiing in various terrain
- 4. Basic technical skiing

Unit Two -- STRENGTH TRAINING (Anaerobic)

The term strength training, rather than weight training is used since the goal is to develop strength by many different methods, including various machines, pulleys and other devices which employ no weights. Strength training can be extremely effective in improving athletic performance and preventing athletic injuries.

Dry-land Training Exercises

- 1. Circuit training (10 stations)
- 2. Leg or stomach routines
- 3. Running in the sand, around trees, etc.
- 4. Hill bounding until muscles fatigue
- 5. Weight circuit (10 stations)

On-Snow Training Exercises

- 1. Over length Slalom and Giant Slalom runs with numerous rhythm and terrain changes
- 2. Long Giant Slalom runs on flat or medium steep terrain
- 3. Obstacle course

Unit Three -- QUICKNESS TRAINING (Anaerobic)

It has been found that strength leads to an increase in the speed of muscle contraction; it has also been shown that there is a correlation between flexibility training and strength training to improve quickness.

Quickness training assists the athlete in being able to move his/her legs, arms, hands, feet, or body as fast as possible when an athletic movement for speed is required. This can be seen in the starting gate of any ski race and in the movements of Slalom skiers.

Dry-land Training Exercises

- 1. Interval Runs - 4 x 30 meters, 2 x 40 meters, 4 x 50 meters.
- 2. Fartlek runs 2 minutes x 4 repeats
 - a) .30 walk
 - b) .30 jog
 - c) .15 stride
 - d) .15 sprint .30 jog
 - e) .30 walk
- 3. Ropes (20 meter) In a tic-tac-toe like design with ropes, alternate jumping forward, sideways, backward and diagonal.
- 4. Stairs

On-Snow Training Exercises

1. Interval runs on flat or medium steep runs (short breaks, pulse up)
2. Very intense fast free skiing with numerous technical and tactical exercises.
3. Various drill courses.

Unit Four -- ACTION/REACTION TRAINING

Action/Reaction performance means the ability of the athlete to perform a sports movement. In the event that a reaction to an action is required, a reaction to that action can be performed at a high level of consistency, speed and power.

Action/Reaction skills are required in Slalom, Giant Slalom and Downhill racing. Constant changing terrain and gate combinations demand a fast and proper execution of movement.

Dry-land Training Exercises

1. Changing directions (whistle, forward/back, left/right)
2. Ins and Outs (10 yard fast, 10 yard slow, repeat, etc.)
3. Ball Games (basketball, soccer, etc.)
4. Lateral hops over rope

On-Snow Training Exercises

1. Ski bumps with short turns
2. Flush drills
3. Rhythm change drills
4. Starts with timing

Unit Five -- COORDINATION/BALANCE TRAINING

Coordination is the ability to perform a skilled movement pattern. For alpine skiers, it is very important to improve eye/foot hand coordination.

Balance is the ability to keep your body in a balanced position. In skiing, this position always changes and requires a constant re-position of body parts to get back in balance.

Dry-land Coordination and Balance Exercises

1. Balance Beam
2. Rope walking (on ground)
3. Volleyball
4. Tennis
5. Soccer

The very best training for balance and coordination, however, is alpine skiing itself.

On-Snow Training Exercises

1. Skiing without poles
2. Skiing with one pole
3. Skiing with unbuckled boots
4. Bump skiing

HOW TO IMPLEMENT A TRAINING PROGRAM

1. Determine days that training can occur.
2. Chose 1 of the 5 units described for each training day.
3. Vary the units as is relative to the days of training.
4. Below is a Sample 4-Week Training Program.

4-Week Training Calendar

Week One

Day 1	Day 2	Day 3	Day 4	Day 5
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Strength Training (Unit 2)		Endurance Training (Unit 1)		Coordination/ Balance Training (Unit 5)

Week Two

Day 6	Day 7	Day 8	Day 9	Day 10
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Strength Training (Unit 2)		Coordination/ Balance Training (Unit 5)		Endurance Training (Unit 1)

Week Three

Day 11	Day 12	Day 13	Day 14	Day 15
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Endurance Training (Unit 1)		Quickness Training (Unit 3) Strength Training (Unit 2)		Action/ Reaction Training (Unit 4)

Week Four

Day 16	Day 17	Day 18	Day 19	Day 20
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Strength Training (Unit 2)		Coordination/ Balance Training (Unit 5)		Endurance Training (Unit 1)

Note: Strength and Basic Endurance training should be developed before any other training aspect is involved.

HOME MAINTENANCE PROGRAM DURING SKI SEASON (2-4 days per week)

1. Warm-Up
2. Stretching & Flexibility

(insert Skiing Stretches)

3. Body of Workout (include at least one aerobic and anaerobic workout per week)

Aerobic	OR	Anaerobic
1-2 days/week for 20+ minutes		1-2 days/week for 20+ minutes
Examples: Swimming, Jogging, etc.		Examples: Interval Training Circuit Training Leg/Stomach Routines

4. Cool-Down

ON-SNOW TRAINING PROGRAM

- I. Amount of time on snow: 3 hours 1 day per week for 8 weeks
- II. Training will consist of the following.
 - A. 65% Technical (Skiing Skills/Ski School Environment)
 - B. 35% Gate Training
 1. Giant Slalom & Slalom Course Training
 2. Tactics
 - a. Start/Count Down
 - b. Line
- III. Racing Experiences
 - A. Participate in Area and State Games
 - B. Participate in local Nastar, Coke Cup, etc.

(insert HOME MAINTENANCE LOG -- hmlog.xls)

Warming Up -- Always bring the athlete's core body temperature to an active level prior to beginning the on-snow activity. THIS MEANS: With skis off and ski boots on, have athletes walk or run in place on snow.

On-Snow Stretching --

- Without skis on, have athletes stretch (reaching gloves to lower legs or ski boot) - hold for 20 seconds/3 times.
- Without skis on, have athletes move laterally (side-to-side) hands in ski pole simulated position/slowly back and forth 20 times/3 sets.
- With skis on, have athletes move forward making parallel steps/push with poles.
- With skis on, have athletes skate or herringbone forward.
- Conduct relay races on a flat surface - two teams sliding, stepping or skating around cones.

Body of the Training Session (Workout)

1. The *technical session* of the on-snow training focuses on the "How-to's" of skiing. Take a progression approach where emphasis is first on skill development or use of exercises and games. The eventual goal is the athletes becoming better skiers. The fundamental skills include balancing movements, rotary movements, edge control movements, and pressure control movements.

Balancing Movements

Balancing movements are those movements needed to maintain the body's position when it is acted upon by external forces. External forces include deliberate actions made by the skier (i.e., turning the skis or adjusting the edge angles) and actions made in reaction to disturbances (i.e., uneven snow surfaces or changes in terrain). The balancing movements may involve relatively gross body adjustments or almost imperceptible adjustments, depending on the circumstances.

The most important in balancing movements is to keep the body relaxed while maintaining proper skiing form.

Rotary Movements

Rotary movements are movements involving rotation of either the whole body or one part of the body relative to another. Like balancing movements, rotary movements may be subtle or quite strong depending on the situation and the skier's wishes. For efficiency and stability, it is best to use the lower body to generate rotary movements. For example, the hips and knees are rotated when making turns. Rotary movements help guide the skis throughout turns and also complement edging and pressure movements. An important thing to remember in making rotary movements is that rotary movements of the inside leg enhance the actions of the outside leg.

Edge Control Movements

Edge control movements are movements of the body that affect the way the edges of the skis make contact with the snow's surface. Coaches need to show the athletes how the successful completion of their turns depends on the way the edges of their skis hit the snow. Demonstrate to the athletes how fine adjustments of the knees, ankles and arms control the edges of the skis. With practice, athletes will perfect edge control movements to achieve the desired turn shape.

Pressure Control Movements

Pressure control movements are movements that regulate and adjust the pressure of the skis on the snow as they move on or through the snow. It is important to work on a smooth and gradual pressure shift to the outside ski when completing a turn. In some upper level skiing, an actual weight transfer from ski to ski is required.

2. The *tactical session* brings the athlete into gate training situations and focuses on the "Where To" or "Where To Go" situation of ski racing. Tactical training sessions should include drill training and race coursework. A coach should not try to teach technical improvements to an athlete during tactical sessions. Gate training primarily focuses on the correct path ("line") a racer should take and the fastest speed through the gate situation(s). Drill courses may be used to teach an athlete proper technical ski racing by repeating shortened ten or fifteen gate courses.

Assessment of Athlete's Current Skill Level

The Skills Assessment has been designed to record each athlete's sports skill performance throughout the Alpine program. Each ability level (Beginner, Novice, Intermediate, Advanced) has defined skills in terms of ski area awareness, technical and tactical development. Each standard reflects how well the athlete executes the desired skill. It is the coach's responsibility to determine the athlete's level of acceptable performance. The assessment will be filled out at the beginning of each season and prior to the athlete's attendance at that year's highest level of alpine competition. The assessment also provides each games competition organization committee with the knowledge of each athlete's ability prior to divisioning and competition.

(see Appendix 1: Skill Sheets and Athlete Assessment for Alpine Skiing -- alpassess.xls)

TEACHING PROGRESSIONS FOR SPECIAL OLYMPICS ATHLETES

The teaching methodology presented in this section can be reproduced with the permission of the Professional Ski Instructors of America. Similar to the guide for the Alpine Skills Assessment of the Athletes, the terminology should be general enough to incorporate into any country's alpine skiing program. In some cases it may not correspond exactly with the methodology and progressions as they are presented from the professional skiing organization in a particular country. This is intended as a guide and may be modified to suit the appropriate presentation of materials.

BEGINNER SPECIAL OLYMPICS ATHLETES

Some keys to remember

1. Whenever possible create a one teacher to one athlete on-snow learning experience.
2. Visual aids/objects may greatly enhance the coach's ability to provide clarity to athletes in judging distances both on the flats and up the hill.
3. Similar to dry-land training, the touch system may help the athlete to understand body positions. This includes angulation, proper stances on skis, identification of body parts (knees, hips, ankles) and knowledge of how they pertain to skiing.
4. It is very important, for any beginner, to build confidence and remove any FEAR.

Outcome

1. Recognize and identify the ski equipment and environment.
2. Perform standing, walking, sliding and climbing movements.
3. Perform straight running movements.

Teaching/Learning Objectives

1. Develop excitement for the sport.
2. Develop travel and propulsion activity.
3. Develop basic posture and equipment familiarity.

Skill Development Objectives

1. Balancing movements --
 - Begin standing and walking in boots.
 - Begin movements with and without poles.
 - Adopt a tall, athletic stance with slight flex in the ankles, knees and waist.
 - Start with the skis approximately hip-width apart. This means that the skis are flat and the outside of the boots are straight below the outside of the hips.
 - Develop coordination while shuffling and walking with or without ski poles.
 - Use poles for balance and support while stepping, climbing and pushing.

(insert photo 38)

2. Rotary movements --
 - Turn the feet with and without skis.
 - Perform walking step turns without skis.
 - Develop control during lateral steps, circular step and walking with change of direction.

(insert photo 39)

3. Edging movements --
 - Walk on flats and stairs; edge using the sole of the boots so they hold on a slight incline. (without skis)
 - Check proper boot adjustments and fit for comfort and control.
 - Use flat skis and edged skis.
4. Pressure control movements --
 - Put pressure on the tongue and back of the boot, and feel how this changes pressure on the bottom of the foot.

- Move laterally; put pressure on the inside and outside of the leg.
- Practice walking with stiff boot soles.
- Get in and out of ski bindings.
- Practice pressure transfer from foot to foot when walking and changing direction.
- Keep equal weight on both skis when sliding.
- Keep weight on the whole foot and sides of feet while side stepping up a little slope.

(insert photo 40)

Activities to help beginner athletes learn skills

The following are some ideas to make lessons more fun and appealing to Special Olympics athletes. Most can be done at any level of the progression with minor adjustments. Use imagination - what works for one athlete does not always work for another. Vary the lessons - try different things. Be creative and, above all, share with other coaches things that work.

- Have the athletes ski with a balloon or rubber ball between their knees, under their arms, or out in front of them.
- Put some snow on a tray and have the athletes carry it without spilling any of the snow.
- Have the athletes count how many times they can make themselves "small" and "tall" from point A to point B.
- Run a slow race where athletes must keep moving and the last person across the finish wins. If and athlete stops during the race, he/she is out.
- Put objects in the snow for athletes to pick up while they are skiing.
- Have the athletes ski to a coach, take an object from his/her hand and give a high five.
- Toss a ball to an athlete as he/she skis by and have the athlete toss it back.
- Demonstrate ways of getting up after a fall and then have a race to see how fast they can get up.
- Act as a traffic cop and play "Red Light, Green Light." (On "Red," the athletes stop skiing. On "Green," the athletes commence skiing.)
- Play "Follow the Leader" with the athletes taking turns as leader; make sure the leader understands where to stop.

Look at each athlete as an individual and organize each lesson around his/her needs. Beginners are usually overwhelmed by the first skiing experience including the lifts, the hills, and their equipment. Respond to the athletes emotional problems by having them think about something other than the situation they may be facing; i.e., ask them what their favorite television program is. Exaggeration of movement and verbal pictures (images) will help the athletes translate and understand more easily; i.e., hopping like a bunny. Each small success will help an athlete maintain interest; many athletes cannot handle frustration. Avoid forcing athletes to do something they object to because that will dull their interest; sometimes just letting them watch will help them get into the group in a more natural way. Competition with athletes can be fun but try to present it in such a way that there are no winners or losers. Have the athletes clap and cheer for each other when they do something well.

TEACHING PROGRESSION FOR BEGINNER ATHLETES

1. *Boot Games* introduce the athletes to the heavy ski boot. Athletes should wear ski boots but without the skis. These games can be started during the line-up to keep the athletes warm and occupied.

Early skills to develop include the following.

- independent leg action
- rotary motion of the foot and leg
- balance on two feet, then one foot.

Games: Follow the Leader

Images: walking uphill like a duck
 running downhill like a pigeon
 hopping like a rabbit
 imitating windshield wipers
 (opening toes, opening heels)

2. *One-Ski Games* introduce the athletes to sliding while keeping one foot free for control. Start one-ski games on a level area.

Early skills to develop include the following.

- gliding on one foot
- balance
- early changes of direction by foot steering.

Games: Shallow Slalom
1, 2, 3 Red Light

Images: spreading peanut butter with the ski
squishing a bug
walking uphill like a duck

It is important to spend time on each foot individually before moving on to two skis. Foot steering is an important skill here. Avoid "left" and "right." Rather, say "point ski toward chairlift" or "point ski toward base lodge."

3. *Two-Ski Games* introduce the athletes to sliding and walking on two skis. Start two-ski games on a level area.

Early skills to develop include the following.

- walking on two skis; climbing
- sliding the skis
- gliding short distances
- moving in a wide stance.

Images: standing tall like a giraffe
being small like a turtle

4. *Early Wedges* start on a level area. Discuss wedge shape with the athletes. Ask them "What does this look like to you?" Ask each athlete individually even if they repeat others' answers. Decide with them what all will call the wedge from now on; i.e., piece of pie or pizza.

Early skills to develop include the following.

- gliding on flat skis; pointing knees toward ski tips, neither of which should be together. Let the athletes try both ways to see the difference.

Games: 1, 2, 3 Red Light
Space Station Docking
(instructor skis in
backward wedge; athlete
docks shuttle in space
station; link hands to dock)

Images: skiing like a cowboy
bowlegged to get knees
apart; pretend to ride a
horse

This is a good time for the coach to take his or her skis off and start helping those athletes who are having trouble getting the wedge. Those who are doing well can climb a short distance and practice their wedge. If there is a slow-moving, single-person lift like a T-bar or rope tow on a very gradual hill, now could be a great time to begin using it.

NOVICE SPECIAL OLYMPICS ATHLETES

Some keys to remember

1. Training devices are available through many disabled training centers.
2. Using the expertise of the instructors from these centers to teach the use of such devices which will allow the proper training of Special Olympics athletes.
3. A ski bra is a metal device clamped onto the tips of the skis and connected by an eyelet. Coaches should consider using a ski bra for athletes who are unable to form a wedge. The ski bra maintains the tips of the skis at a fixed distance. This device, however, should only be used as temporary training device removed once the athlete reaches the appropriate ability level.

Outcome

1. Perform wedge movements.
2. Perform wedge change up movements.
3. Perform wedge turn.
4. Perform wedge traverse to christy stop with side slipping exercises.
5. Perform the skiers' basic stance.
6. Introduce the ski poles.

Teaching/Learning objectives

1. Ride the beginner lifts; ride other lifts.
2. Improve confidence; improve control with turning and stopping skills.
3. Ski the easiest beginning terrain with linked, smooth wedge turns.
4. Develop speed control by developing turn shape.
5. Transition from wedge to parallel side slipping and skidding.

Skill development objectives

1. Balancing movements
 - Descend on the inside edges of the skis with the tails further apart than the tips; make adjustments from gliding to breaking.
 - Keep the hips somewhat centered between the skis.
 - Assume a fairly tall stance, which allows for muscle/skeletal efficiency, appropriate flex in the ankles, knees and hips encourages skill efficiency.
 - Center balance on the whole foot, with the ability to work the whole ski.
2. Rotary movements
 - Demonstrate brushing both heels put into a wedge (pie shape).
 - Demonstrate varying the size of the wedge by controlling the displacement of the ski tails.
 - Actively guide the inside leg and foot, this complements the guiding action of the outside leg and foot.
3. Edge control movements
 - Maintain relatively flat skis for gliding wedge.
 - Form a braking wedge with increased width in the wedge and an increased edge angle.
 - Vary wedge size and edge angle.
 - Guide the skis throughout the arc of the turn to develop the desired turn shape. The inside ski becomes flatter while the edge angle on the outside ski increases.

(insert photo 48-49)

4. Pressure control movements
 - Maintain equal pressure on both skis from straight run to wedge variations.
 - Keep weight centered on the whole foot with some pressure against the top of the boot.
 - Gradually put pressure on outside ski as the turn develops, rather than stepping from one ski to another.

(insert photo 52)

INTERMEDIATE SPECIAL OLYMPICS ATHLETES

Outcome

1. Perform a beginning wedge christy. (insert photo 60)
2. Increase the speed and length of the christy.
3. Perform a wedge christy.
4. Ski small bumps using pole plant.
5. Perform beginning parallel movements.

Teaching/Learning objectives

1. Improve balance on varying terrain and snow.
2. Develop confidence and control on all green and easiest blue terrain. Integrate pole use with balancing movements, timing and matching of the skis.
3. Match the skis before the fall line.
4. Reduce the wedge opening. (insert photo 63)
5. Develop patience during parallel initiation.
6. Use small bumps with pole plant develop confidence in parallel stance throughout the turn.

Skill development objectives

1. Balancing movements
 - While rising to initiate the turn, guide the ski tips toward the new turn.
 - Use pole swing to assist the movement toward the new turn.
 - Make the width of the wedge and the parallel matching narrower.
 - From a fairly tall stance, increase flex in the ankles, knees, hips and torso throughout matching and the rest of the turn.
2. Rotary movements
 - Continue the guiding activity of the feet and legs at the initiation and throughout matching the rest of the turn.

(insert photo 66)

3. Edge control movements
 - Use subtle ankle movements that correspond with knee movements to assist the flow of the initiation and fine tuning of the turn arc.
 - Encourage students to shape the turn. Skidding with roundness is desirable and introduces an element of carving to the turn.
4. Pressure control movements
 - Make the pressure change to the new outside ski more active during initiation.
 - Balance on the whole foot through all phases of the turn.
 - Make the inside ski lighter. This is due to the increase of speed and edge angle to the snow and the active flexing and guiding of the legs and skis.
 - Time the ski pole touch to trigger the matching process as a more distinct pressure transfer from the inside ski to the outside ski takes place.

(insert photo 69)

ADVANCED SPECIAL OLYMPICS ATHLETES

Outcome

1. Perform open parallel movements.
2. Perform turns on varied terrain and work on turn shape variations.
3. Perform parallel turns.
4. Perform parallel turns on steep terrain, moguls, powder and cruddy snow.

Teaching/Learning objectives

1. Transfer pressure gradually and quickly from ski to ski in parallel turns.
2. Make short radius parallel turns in the fall line, medium and long radius turns across the fall line; use poles to enhance rhythm and timing variations. (insert photo 71)
3. Develop confidence on a variety of terrain, including all blue and some black diamond terrain.
4. Develop skidding and carving versatility for selecting the correct tactics for terrain, speed and snow conditions.
5. Improve carving skills for all terrain and turn shapes.
6. Develop mogul skiing skills.
7. Develop powder skiing skills.

Skill development objectives

1. Balancing movements
 - Initiate the turn with the skis in a parallel relationship. (insert photo 80)
 - Make turns on a variety of terrain and change turn shape.
 - Develop pole swing and touch to assist completion and initiation movement patterns.
2. Rotary movements
 - From initiation through completion, actively steer both legs and feet in a parallel relationship.
 - Redirect both ski tips toward the fall line.
3. Edge control movements
 - Release both edges at initiation.
 - Transfer pressure earlier from ski to ski, and perform concurrent edge change.
 - Develop progressive edge angle through angulation and inclination.
 - Use knees and feet for fine tuning.
 - Shape the turns. Make them rounder but somewhat skidded.
4. Pressure control movements
 - Transfer pressure from ski to ski during initiation.
 - Increase pressure throughout the turn, particularly on the outside ski.
 - Use different turn shape options to increase or decrease pressure during the arc of the turn.

ALPINE TACTICS

Types of Turns

- Long turns
- Short turns
- Transitions
 - Long to short
 - Short to long

Common Errors

- Initiation too early
- Initiation too late
- High or low line

GIANT SLALOM AND DOWNHILL TACTICS

Initiation

- Body position
- Weight transferred properly
- Shoulders square to hill
- Hands forward

Control - steering

- Outside leg extended
- Forward pressure extended
- Angulation
- Body/Hand position

Completion - Preparation

- Release of edge angle
- Neutral pressure
- Body position

SLALOM TACTICS

Physical requirements

- Balance, flexibility
- Quickness, speed, agility
- Coordination, reaction, reflexes
- Strength, power
- Anaerobic and aerobic qualities

Model of a slalom turn

- Edge set
- Gate clear
- Weight transfer
- Pole plant

Phases of the turn

- Edge set
- Gate Clear
 - inside arm clear
 - outside arm clear
 - chest or arm clear
- Weight transfer
- Pole plant

DRILLS

For all ability levels, a coach may use cones, slalom or giant slalom poles, and gates for specific drills to develop the athletes' line and timing.

For beginner skiers:

- Set two cones on the flats ten yards apart and allow skiers to walk and/or glide or ski.
- Set a start area to practice the ten-meter walk start and the glide start -- always use the proper countdown.
- Practice with and without ski poles.

For novice skiers:

- On a novice terrain, use cones, ski poles, or bamboo poles to set a rhythmical (back and forth slalom) course six to ten gates in length.

- Over the space of 150 feet and on novice terrain set four downhill gates that keep the athlete turning across the fall line -- also set a start gate and finish line. This exercise allows the athletes to make long radius turns in a balanced position, emphasizing standing on the outside ski in the turn.
- This is an excellent drill for all ability levels. Intermediate and advanced skiers should ski this drill on intermediate terrain.

For intermediate and advanced skiers:

For these ability level skiers, a coach may set more specific line and timing drill courses such as tactical gate training drills. In almost every athletic endeavor, the desired performance is taught and learned through a logical progression from general to specific, from partial to the whole, and from quantity to quality. Ski racing and its related skills are taught and learned in the same manner.

Effective coaches will attempt to provide a variety of learning situations which accomplish very specific outcomes based on individual needs. Specific drills should, therefore, be utilized; this approach will produce desired outcomes through improved motor learning, with a minimal amount of verbal feedback from the coach.

A few basic drills are presented here which might be used. They do not, and should not, represent the total repertoire of drills in any ski coach's arsenal. The successful coach will use some of these and, along with his/her own ingenuity and creativity, modify or devise other drills to accommodate the individual's needs -- the end result being improved overall performance.

Each day on-snow training should begin and end with free skiing.

Drills

- a. High Line Drill: Set very tight GS type gates. Almost walking speed -- athletes must stay high, start early and come under to remain high.
- b. Snowplow Edge Drill: From snowplow, athletes make clean edge changes to pass each gate without turning or sliding the skis. This shows how to go deep into a turn. Early pressure will result in coming above the gate and sliding to get around.
- c. Weight Transfer/Initiation Drill: Set long radius GS type turns. Be sure to have room during traverse to transfer weight to uphill edge of uphill ski, ride it 20-30 yards, then roll it over to initiate turn. Athletes need to concentrate on weight transfer, balance, anticipation, pressure, line, and angulation. The progression of this drill is to shorten the traverse distance as the racer becomes more proficient with his weight transfer. The goal is for athletes to eventually go from inside to inside edge.
- d. Tight Line Drill: Set very tight flush, gates less than ½ the ski length. Athlete must hop skis through. Concentrate on balance, agility, foot-eye-hand coordination.
- e. Swiss Drill: Make every third gate a double gate so that athletes have to make a 360° turn around it. Set 8 gates with two 360's plus start and finish. Set dual courses for competition. Athletes must relax and use agility, balance, determination, perseverance, high line in order to make a short 360, and HUSTLE!
- f. Funnel Drill: Athletes start out with short turns, increase radius, then decrease back to short turns.

(include drill illustrations)

Giant Slalom

Gate drills should begin with giant slalom-type turns set in a rhythmical sequence, with vertical and horizontal distances remaining constant throughout a specific drill, whether it be long-even, medium-even, or short-even turns, etc. To begin with, drills should be simple and easy in order to build confidence but should be set in such a way as to demand complete turns. Begin emphasizing proper tactics early in training.

As confidence grows, courses should become more demanding in terms of terrain, type of turns, speed and snow conditions (ruts, ice, etc.). Helper poles, pine boughs, or colored dye can be used to stress proper timing and line in these new situations. When good ruts form (tactically in the correct spots), helpers can be removed.

Drills which stress side hill traverses should be used.

Other drills should be set up on flats that allow skiers to determine whether it is faster to ski a flat ski or use stepping or skating maneuvers.

Training courses that allow the skier to work on stepping (inside/outside, inside/inside, and uphill/uphill) should be diligently used.

Drills

- g. Line Giant Slalom gates with helper pole above gate:
Set courses to specify inside to inside edge/inside to outside edge depending on distance/time between turns. Note: This drill emphasizes the start of the turn.
- h. Giant Slalom course with helper pole below the gate:
Set courses to specify inside-inside or inside-outside edge change. Note: This drill emphasizes ending turn under gate. Pull helper pole after line is set.
- i. Set course using either above or below helper mixing inside-inside and inside-outside preparations.
- j. Set open 6-8 gates evenly spaced -- to allow racers to set the line without helper poles. which run is faster for them. Finally, set full length courses for time -- race simulation -- no more than four runs per day.
Set 6-8 closed gates evenly spaced -- same goal.
Set 6-8 evenly spaced oblique gates.
Set extra long courses (overload training) where the emphasis is on mileage -- skiing courses correctly even when tired at the end of the run. Strongly emphasize correct line and technique throughout this drill.
Set 6-8 gates with start to emphasize speed -- a sprint. Time these runs so they can compare for themselves.

(include drill illustrations)

Slalom

When beginning slalom drills, use single poles. The major emphasis here, however, will be on good technique. Different drills can be set in a sequence down the hill with a start and finish gate. Slalom drills should begin as in giant slalom with open, even turns. Drills should emphasize unweighting, pole plants, turn completion, edge set and getting on the new ski at the proper time. As abilities improve, increase the lateral distances between gates and begin forcing the skier to step to make the next turn. Proper timing becomes more imperative, and the big lateral distances help teach agility, coordination, and patience.

As technique improves, slalom drills should progress to situations where full gates are employed. Emphasis should now shift and be placed more on proper tactics although technique should not be overlooked. Drills here may utilize only 8-15 gates. Helper poles, boughs, or colored dye can again be used to stress proper timing and line.

As before, use drills that move the skier back and forth across the hill with open gates. Begin with open, even turns and progress to more complicated situations. Set a back and forth drill which leads into a 3-5 gate vertical followed by three more back and forth gates. Here, rhythm changes incorporating the element of timing and line can be learned.

Time should be spent in drills working on setting on steeps and vice versa. Helper poles or marks can play an important role when initially working on these situations.

Drills

- k. Line drills -- set 10-15 gates at a time with the helper pole set above the gate to delay the start of the turn. Different courses should be set to emphasize inside to inside edge and inside to outside edge, depending on the time and distance between gates.
- l. Set course of 7-10 gates which progress from short to long turns and then back to short turns. Be sure to set this course so that the hill is traversed in both directions.
- m. Set course of 15-20 gates where the poles are about half the normal distance apart. This drill emphasizes quickness, control, and economy of motion.

- n. Set course for entry and exit of vertical combinations, by setting 2-3 round gates then into 5 vertical gates, then across the hill to 5 more vertical, etc. for 4-6 flushes and end with 2-3 round gates.

(include drill illustrations)

Suggestions for the teacher/coach

When practicing drills, use timing frequently. The racer will go full-out and learn his or her technical, conditional, tactical and speed limitations. It makes no sense to train at 75% and then try to race at 100%. Set courses from top to bottom, let racers inspect them briefly and sometimes not at all for reflex training and adaptability. Length of courses and drills will depend on the training goal and terrain. Long courses and over-length courses (overload training) work on endurance, and concentration, as well as good technique and tactics.

COMPETITION EVENTS

Assessment

1. Athletes should be assessed for their ability to compete on certain terrain and in particular events.
2. Assessment should be done prior to attending a competition on the local level.
3. Assessment should be a function carried out by the local coach.
4. Assessment should be required at the start of the season and again just prior to the athlete attending Area, Regional, State, or National competitions.
5. Assessment provides the race organizer with the appropriate ability level groupings for all of the athletes competing.
6. Assessment should be scheduled for the first part of all alpine competitions.
7. Process of assessment:
 - Athletes are organized by ability level.
 - By organizing athletes from the same programs with a sequence of registration numbers, alpine officials may then correspond bib/start numbers sequentially. A program may travel with all athletes and coaches during the first on-snow events; i.e., partner match-up, assessment, and divisioning.

HOLDING A COMPETITION EVENT

Responsibility of the Special Olympics Staff

- Take part in the site selection process.
- Visit ski area.
- Offer training school -- a great benefit for an area to see athlete skill/ability levels.
- Offer coaches education school -- should be held at the resort.
- Have Winter Sport Rules Book -- for area.
- Use Alpine officials -- in conjunction with ski area where appropriate.
- Formulate budget.
- Use sensitivity to appropriate scheduling of this event at the ski area.

Responsibility of the Ski Area

- Holding the event as stated by the Sport Rules Book
 - a) providing proper terrain
 - b) providing appropriate gates, flagging, start and finish banners, safe competition venue, timing, race officials (where appropriate)
 - c) allowing for the correct number of race arenas
 - d) grooming
- Press
- Medical
- Area personnel support
- Lodge space -- appropriate space in the lodge for registration, family center, etc.
- Parking facility

Others to Involve

- Chamber of Commerce
- Local ski club
- Local civic organizations
- National Ski Patrol
- Area competition ski racing program
- All local schools (middle school on up)

STRENGTH AND CONDITIONING ACTIVITIES

Alpine skiing requires a high level of fitness to meet its physical demands. This section of the Guide will introduce a few simple techniques to assist athletes in improving their flexibility, muscle strength, endurance, and mental preparation. It will help the coach to incorporate activities for developing fitness within practices. For athletes who only have one organized training session a week, these activities can also be added to a home training program and will dramatically improve their skill.

Neck Roll (sides of neck)

- Start in a sitting or standing position.
- Slowly lower the right ear toward the right shoulder (the stretch will be felt on the left side).
- Hold the stretch 10 to 15 seconds.
- Repeat lowering head toward the chest, left, then right again.

Side Bend (upper back, shoulders, and obliques)

- Stand with knees slightly bent, feet shoulder-width apart, and toes pointing forward.
- Place one hand on the hips for support and extend the other arm overhead, keeping the upper arm near the ear.
- Slowly bend to the side at the waist, stretching toward the hand or the hip.
- Hold the stretch for 10 to 20 seconds.
- Repeat to the opposite side.
- Variation: extend both arms overhead keeping the head in line with the arms, continue into side bend from the waist.

Lat Stretch (upper back, shoulders, and arms)

- Start in sitting or standing position.
- Interlace the fingers above the head with the palms facing upward.
- Pull arms back behind the head and up.
- Hold the stretch for 15 to 20 seconds.
- Care should be taken not to drop the head forward or arch the back.

Lunge Stretch (hips, groin, hamstring, and quadriceps)

- Stand with feet pointing forward.
- Step forward with the right leg into a lunge until the right knee is in line with the right ankle. Hands are placed on the floor for support. Head is up.
- Lower the hip downward to create an easy stretch.
- Hold the stretch for 15 to 20 seconds.
- Repeat to the opposite side.
- Remind the athletes not to bounce.
- Variation: rest the back knee on the floor, pressing the hips forward and down. Hands may be held on the bent knee or on the floor for support.

Butterfly Stretch (groin)

- Sit on the floor with the knees bent and soles of the feet together.
- Pull the heels as close to the body as comfortably as possible.
- Grasp the ankles or shins and place the elbows on the inside of the knees.
- Gently press the knees open with the elbows and stretch the upper body forward until an easy stretch is felt. Be sure that the bend is initiated from the hips with a flat lower back and the eyes looking forward. Do not round out the upper back.
- Hold the stretch for 15 to 20 seconds.

Williams Flex (hips, lower back, and hamstrings)

- Lie on the back.
- Bend the left knee, keeping the left foot on the floor. Extend the right leg up, grasping the leg below and behind the knee.
- Gently pull the leg toward the chest, keeping the leg straight.
- Hold the stretch for 15 to 20 seconds.

- Repeat to the opposite side.

Leg Crossover (lower back and hips)

- Sit on the floor with legs out in front and hand on the floor in back for support.
- Cross the right leg over the left placing the right foot next to the outside of the left knee.
- With the left arm, pull the bent knee across the body toward the left shoulder.
- Hold the stretch for 30 seconds.
- Repeat to the opposite side.

Hurdler's Stretch (hamstring and lower back)

- Sit on the floor with the left leg extended and the right knee bent with the sole of the right foot placed beside the knee or thigh of the extended leg.
- Look straight ahead and slowly bend forward from the hips toward the foot of the extended leg until an easy stretch is felt. **DO NOT BOUNCE.**
- Hold the stretch for 20 to 30 seconds.
- Repeat to the opposite side.

Calf Stretch (calves and Achilles tendon)

- Stand in lunge position with both feet pointing forward. Hold on to a solid support or place hands on the front thigh for balance.
- Lower the hips downward, slightly bending the knee of the extended leg.
- Remember to keep the back flat, toes pointing forward and the heels down. The Achilles tendon area needs only a slight feeling of stretch.
- Hold the stretch for 20 to 25 seconds.
- Repeat to the opposite side.

(insert illustrations from Aerobics SSPG)

CROSS TRAINING SUGGESTIONS

All Special Olympics athletes should be encouraged to participate in at least two seasons of sports and whenever possible, participate in sports during every season of the year. Different season sports complement each other for example:

- playing soccer helps the alpine skier's endurance and quickness.
- running activities make the alpine skier more aerobically fit.
- powerlifting in the off-season increases the athlete's strength.
- gymnastics increases the skier's balance and coordination.

A preseason Alpine Training Program may consist of a variety of other Special Olympics sports in an abbreviated fashion. For example, athletes play on a 20-minute soccer game at the end of an aerobic training session or go for a 20-minute bike ride after a weight training session. Biking, running, swimming, ice skating and soccer during the summer to improve conditioning during the off-season.

NUTRITION BASICS

Nutrition influences performance. Athletes need nutrients including:

CARBOHYDRATES - are the primary energy sources and 50-60% of the daily diet - bread, cereal, rice, pasta, potatoes, etc. Simple carbohydrates are high in calories but empty in nutritional value - sugar, candy, syrup, etc.

FATS - are secondary energy sources and 20-30% of the daily diet, should come from primarily polyunsaturated (vegetable) sources.

PROTEIN - repairs and replaces cells and helps in regulating blood fluids, 10-20% of the daily diet - lean meat, fish, poultry, eggs and dairy products.

VITAMINS - regulate growth and development and should come from a well-balanced diet.

MINERALS - regulate fluid exchange and should come from a well balanced diet.

WATER - is one of the most essential of all nutrients. Drinking water before, during, and after events or training sessions helps to produce energy from the food we eat. It also helps to maintain temperature control of our bodies on both hot and cold days. Athletes must drink more water than it seems that we are thirsty for. Especially during summer training sessions, athletes may lose fluids just by sweating. After losing only two percent of body weight (two pounds, if you weigh 100 pounds), performance suffers. Make sure you drink at least four to eight glasses of water a day during the competition and training seasons.

Athletes should eat a meal at least 1.5 hours prior to a competition or hard practice. This meal should be high in complex carbohydrates, avoiding proteins and fats. Baked potato, spaghetti, rice and cereal all make good choices. Water needs to be available before, during and after training and competition. A proper diet for improved athletic performance includes:

- eating a variety of wholesome foods
- eating a good breakfast
- chewing each bit of food thoroughly
- avoiding high sugar foods such as cakes, cookies, and soft drinks
- limiting the intake of red meat
- avoiding between-meal and late night snacks
- eating balanced meals regularly
- drinking at least four glasses of water daily
- getting plenty of sleep
- drinking plenty of water after heavy training
- taking food supplements such as vitamins; mineral and protein may not be necessary if proper eating habits are followed.

CARE FOR COMMON MINOR INJURIES

It is the coach's job to maintain as safe an environment as possible. It is strongly recommended that coaches have certification in CPR and First Aid or that volunteers be recruited who already have first aid, medical athletic training or emergency care certification. Athlete medical forms should be reviewed prior to the start of practice and on hand at all training and competition. There should be a plan for emergencies. Using the Coach's Safety Checklist will help to prevent injury by assuring adequate supervision, equipment, facility, warm-up and stretching.

When an injury does occur, *STAY CALM, and administer only basic first aid.* When in doubt, or when more care is needed consult the athlete's family and a physician.

TREATING FLOOR BURNS, STRAINS, CONTUSIONS, MINOR BUMPS AND BRUISES:

- R - Rest, stop any pain-causing activity.
- I - Ice for 24-36 hours after the injury
- C - Compress with elastic bandage if needed.
- E - Elevate to avoid edema and subsequent swelling

CONDITIONS REQUIRING MEDICAL ATTENTION:

- Significant swelling or dislocation of an extremity.
- Obvious deformity of an arm or leg.
- Severe pain.
- Inability to bear weight on a lower extremity.
- Lacerations with or without fractures.
- Significant swelling of a joint, i.e. elbow, wrist, knee, ankle.
- Loss of sensation in an extremity.

CONDITIONS MANDATING THAT ONLY EXPERIENCED MEDICAL PERSONNEL MOVE THE ATHLETE

- Loss of consciousness.
- Neck or back injury with loss of sensation or motor power in arms or legs.
- Head injury with disorientation and/or visual changes.

If an arm or leg may be broken, that is, if it looks deformed or has major swelling and tenderness, treat it like a break. Take the athlete to a physician and:

- Rest
- Ice
- Immobilize
- Elevate.

Always have someone familiar with Basic Life Support and Cardiovascular Resuscitation at every training session, even though the possibility of cardiac arrest is much greater in the spectator section than with the athletes, it is always present. Initial measures include:

- Establishing unresponsiveness
- Calling out for assistance
- Positioning the victim.

ABC's of CPR for those who **have had CPR Training:**

Airway

- Open airway (tilt head and chin).
- Establish breathlessness (look, listen, feel).

Breathing

- Check for foreign body (airway obstruction).

- Mouth to mouth breathing.

Circulation

- Check for pulse.
- Start chest compression (if no pulse is felt).

REHABILITATION/TREATMENT FOR CHRONIC INJURIES

- 1) Blisters
 - Keep pressure off new blisters using a felt "doughnut."
 - Where the skin is torn, use extreme care.
 - Keep it clean and cut skin halfway around the perimeter without removing the skin.
 - Apply antiseptic ointment and a sterile dressing.
 - When underlying tissue toughens, cut away the remaining flap of skin.
- 2) Abrasions and contusions (floor burns and deeper bruises)
 - Keep them clean.
 - Expose them to the air when possible.
 - Keep them dry.
 - Encourage gentle activity.
- 3) Chronic knee pain, thigh muscle overload, tendonitis, stress fractures, and ligament strain. Follow the doctor's directions, which will generally include:
 - Rest for 5-7 days.
 - Ice for pain.
 - Stretch related muscles to strengthen them.
 - Move gently, stopping at the point of pain.
 - Exercise to strengthen afflicted area as it heals.

GETTING READY FOR COMPETITION

TAKING AN ATHLETE OR TEAM TO A COMPETITION

Before the Competition

- Review registration materials, noting specifically the events offered, requirements, deadlines, costs and what they cover, and procedures for registering (required signatures and approvals).
- Assess athlete's readiness to travel. As appropriate, discuss with parent or guardian.
- Arrange for uniforms, equipment and first-aid kit.
- If not provided, arrange for transportation, housing and meals.
- Review medical and release forms for effective date and accuracy.
- Complete and submit necessary registration materials, indicating any special concerns or limitations of athletes.
- Inform athletes and their families about the plans, directions, housing, emergency telephone numbers and arrangements for families to attend as spectators.
- Arrange assistance for any athlete that needs help acquiring or packing personal care items, medication and clothing.

- Recruit and train assistant coaches and chaperones. "The delegation needs a minimum of one coach or chaperone for every four athletes. Be certain that each understands the policy of no alcohol or cigarettes and the 24-hour nature of the job.)
- Arrange housing by sex with chaperones.
- Inform local media about the trip.
- Continue training with conditions as similar to those of the competition as possible.
- Review the Competition Coach's Handbook and share the schedule and special event plans with the chaperones.

At the Competition

- Arrive on site at least one hour before the first event.
- register your delegation (note credentials needed, competition times, venue location, directions to the venue, meal times and locations, emergency and inclement weather procedures, how and where to get medical help and how and where to find security volunteers.)
- Take part in assessment divisioning and Opening Ceremonies.
- Build the athletes' schedules around their competitions. Provide the following:
 - Adequate rest
 - Pre-competition meals (high in carbohydrates and at least one and one-half hours before competition)
 - Pre-competition warm-up and stretching
 - Activities with minimal distractions in between competitions
 - Frequent water breaks
 - Practice on the off-days during long ski trips
- Recognize all athletes and affirm their performances.
- Give each athlete as much information about his or her performance as they can understand (times or scores, comparison to personal best, comparison to team goals, etc.).
- Assure that athletes take advantage of the special events and activities.
- Keep each chaperone up-to-date and listen to their concerns or suggestions.
- Monitor the physical and emotional condition of each athlete.
- For those athletes unable to make sound judgements, monitor meal and snack selections, personal hygiene, and use of spending money.
- Include the Closing Ceremonies in your plans, completing the Competition experience for the athletes.
- Welcome family members who attend, arranging for their participation as appropriate.
- Complete any evaluation forms requested.

After the Competition:

- See that local media receive Competition results.

- Thank the assistant coaches and chaperones who helped.
- Thank families who attended.
- Update all families regarding the athletes' and teams' results.
- Letter of thanks to competition team of GMT.
- Letter of thanks to the ski area.

DIVISIONING IN SPECIAL OLYMPICS ALPINE SKIING

In Special Olympics, every athlete must have a reasonable chance to win. Whenever possible, athletes are divided in Special Olympics age groups and segregated by sex before being placed in divisions. However, that is not always possible.

The following order has been shown to be effective for divisioning in Alpine Skiing:

- 1 - Separate men and women.
- 2 - Divide by ability level -Beginner, Novice, Intermediate, Advanced
- 3 - Asses all athletes (see Skills Assessment Process P.____)
- 4 - Women start first.
- 5 - Starting order of athletes and bib numbers for divisioning will be determined by specific program. (i.e.: local, state, regional or national programs.) Specific programs travel together at the start of skiing competitions in order to simplify venue logistics - starting times, place of venue, etc.
- 6 - All athletes will take two timed division runs of which the fastest time will be used for divisioning. If the athlete's time is affected by disqualifications or falls in both runs, additional runs may be provided to allow for a proper divisioning time.
- 7 - The best time for each athlete's divisioning run will be used to establish the athlete's division and the starting order.
- 8 - Divisioning:
 - a. Separate men and women
 - b. Divide by age
 - c. Rank order determined by time
 - d. Group between three and eight athletes within a division.
- 9 - If an athlete does not fit into a division based upon this format, combine men and women into a division.
- 10 - When an athlete still does not fit into a division based upon this format, ADD THE ATHLETE to the next best (next faster or higher) division. Even though the athlete may not have a reasonable chance to win, this \at least permits the athlete to compete.
- 11 - When an athlete still cannot be divisioned, that athlete shall be allowed to compete in a single person event.

MANAGING A SMALL COMPETITION

In any state, province, or country where a Special Olympics alpine ski event is scheduled to be held, the Special Olympics Chapter, Provincial, and/or National office should develop an Alpine Skiing Committee whose overall function is the responsibility of conducting an event by the Winter Sports Rules of Special Olympics International and the International Ski Competition Rules of the International Ski Federation (FIS). The Alpine Skiing committee will:

1. Confirm the proper alpine venue(s) -- visits to the Alpine Skiing Facility for an on-site selection to determine proper terrain for Alpine Skiing events (see the SOI Winter Sports Rules Book for vertical drop, number of gate, etc.) A Games Venue Management meeting should take place and include the Alpine Committee, Alpine Skiing Officials, and the Mountain Management Staff. This meeting is a "dry run" and venue set-up.
2. Recruit trained officials.

The Jury

- Chief of Race
- Technical Delegate
- Referee
- Assistant Referee
- Chief of Course
- Start Referee
- Finish Referee

Other Venue Chiefs

- Chief Gate Judge
- Chief of Timing and Calculations
- Race Secretary
- Course Setters

Officials associated with the Alpine Venue

- Chief of Medical Services
- Chief of Information
- Chief of Race Equipment
- Signage Chairman
- Communications
- Forerunners
- Starter

* For job clarification and responsibilities, please consult Section VI of this Guide on the Official Special Olympics Rules for Alpine Skiing.

3. Recruit volunteers.
 - Runners
 - Stagers
 - Escorts
 - Gate Judges
 - Stewards - Course Police
 - Ski Patrol
 - Announcer
 - Assistant Starter.

Other volunteers associated with Alpine activities include the following.

- Awards Committee
- Awards Presenters
- Awards Stagers
- Computer
- Medical Services
- Information Services
- Honored Guests coordinator
- Security
- Storage
- Communications
- Transportation

- Food Services
 - Language Services.
4. Secure equipment and supplies.
 - Flex Gates and Bamboo Poles as per Giant Slalom courses
 - a) Novice max # gates = 60 poles
 - b) Intermediate max # gates = 120 poles
 - c) Advanced max # of gates = 160 poles
 - Beginner Events
 - d) Glide max # of poles = 4
 - e) 10 Meter walk max # of poles = 4
 - f) Super Glide # of poles = 22-26
 - Starting Banners
 - Finish Banners
 - Starting Wands - 6 (one back-up per venue)
 - Timing - 3 systems (one each also for Glide and 10 Meter)
 - Communication
 - a) Starter to Timer
 - b) Radios - minimum 4 channels - one per ability level and one general communication for Alpine Venue
 - First Aid materials
 - Poles for slalom (flags, if available)
 - Panels for GS and Downhill
 - Timing Sheets/Timing Board
 - Snow Fence around Start area, Finish area, and for general venue set up
 - Gate Judge Cards
 - Gate Judge aprons, clipboards, and pencils
 - Competitor Bibs
 - Course Setting needs
 - auger, drill, or crowbar
 - carpenters chalk to mark pole position in snow.
 5. Develop a structured committee meeting schedule.
 6. Develop a contingency plan.
 7. Run the events according to schedule.

Other logistical considerations for Competitions/Games

- Put together a detailed list of equipment needs.
- Put together a detailed list of equipment delivery prior to the event and pick up after the event.
- Provide agenda for the Team Captain's meeting (see sample agenda on next page). (insert Agenda-teamcap.pm4)
- Select an Evaluation Team - the responsibility of the Games Organization Committee to this group.
- Detail an evaluation review process of the games.
- Complete list of individuals and companies to thank for the games' support.
- Review procedures on how to file a protest.

SAMPLE COMPETITION SCRIPT 1

OPENING CEREMONIES

MC:

"All Special Olympics athletes, honored guests and celebrities please report to the march staging area. The march will begin in a few minutes."

If band is used, MC introduces band as they enter and take their places.

MC:

"Good morning/afternoon/evening ladies and gentlemen. Welcome to the Opening Ceremonies of the (year)(facility or community) Special Olympics Competition. Let's give a big hand to the athletes as we begin our ceremonies."

Music begins and march of Special Olympics athletes commences.

If there is a banner, athletes carrying the banner will lead, followed by the other athletes and coaches.

The final individuals in the march will be the athlete and honored guest chosen to recite the Special Olympics Oath and open the event."

MC:

"(Name of athlete from class/school/program) and our special guest (name of honored guest) will now lead us in reciting the Special Olympics oath."

Special Olympics athlete:

"Fellow athletes, please stand; repeat after me..."

Let me win (pause as others repeat)

But if I cannot win (pause as other repeat)

Let me be brave in the attempt (pause as others repeat)."

VIP:

"I declare the (year)(facility or community) Special Olympics Competition open."

MC:

"That concludes the Opening Ceremonies of the (year)(facility or community) Special Olympics Competition. Ladies and gentlemen, please join me in saluting our Special Olympics athletes and coaches as they begin the competition."

*If a torch is used, the designated athlete should be introduced and will carry in the torch symbolizing the Flame of Hope at this point.

SAMPLE COMPETITION SCRIPT 2

AWARDS CEREMONY

A volunteer brings the athletes to the awards area as soon after competition as possible, in correct order of placement.

Participant (if any)

8th

6th

4th

2nd

1st

3rd

5th

7th

Start the music as athletes move from the awards staging area to the presentation area.

MC:

"Ladies and gentlemen, it is my pleasure to announce the results in the (division) of the (age and gender group)(event). In eighth place, with a time/score of (time/score), (name)...(pause for award presentation). In seventh place, with a time score of, etc."

For a Competition, the Awards area should be large enough to hold the largest division or heat. If a Special Olympics banner is available, it is an appropriate back drop. An awards stand with enough placement boxes for an entire division is also an option, but not required for a small contest.

SAMPLE COMPETITION SCRIPT 3

CLOSING CEREMONIES

MC:

"Special Olympics athletes and coaches, please assemble for the Closing Ceremonies. And now, after a hard day of competition and in a spirit of friendship, we will begin the parade to form the friendship circle."

Introduce the participating athletes or programs as they form the circle.

MC:

"This Special Olympics Competition would not have been possible without the efforts and dedication of the volunteers and officials under the leadership of (competition organizer's name). The (facility or community) Special Olympics Competition has come to an end, but the memory of this wonderful competition will remain with us for many days to come."

MC:

"Athletes, you should be proud of your accomplishments and of your hours of hard work and training. You are all winners. Now, as the competition comes to a close, let us join hands in the circle of friendship."*

MC or Honored Guest or Head Coach:

"I declare the (year)(facility or community) Special Olympics Competition closed."

*If a torch is used, the designated athlete should be introduced and will carry the torch out at this point.

SAMPLE COMPETITION SCRIPT 4

DURING AN ALPINE SKIING COMPETITION

It is helpful to have biographical information about each athlete for announcing purposes. Biographical information includes the athlete's full name, age/sex, home town, coach's name, local ski area where the athlete trains, and any awards the athlete has received at previous national or international competitions. It is also helpful to have information about the host ski area including the number of Special Olympics events held previously, the name of the owner(s), any awards the ski area has received from magazines, ski industry, etc., whether or not the ski area is a sponsor of the event and then explain the sponsorship, and information pertaining to other major sponsors for the competition. Be prepared also to provide race-day information including weather and slope conditions, ability levels of competition (Beginner, Novice, Intermediate or Advanced), course specifics. Course specifics include the number of gates, the skiing discipline (Slalom, Giant Slalom, or Downhill), and a description of the discipline about the event and the differences between the different disciplines.

Announcing athlete in the starting gate

"In the starting gate is (athlete's name), from (home town). He/She is coached by (home coach's name) and ski out of (name of local ski area)." Any national or international alpine event participation and awards received can also be announced.

Announcing athlete on the course

Briefly describe how the athlete is doing on the course while racing. Example: "(athlete's name) is having a tremendous run and should certainly be on the awards stand" OR "(athlete's name) has skied out of the course, but is climbing to ski through the gate properly and avoid a disqualification. Let's cheer him/her on!"

Announcing athlete in the finish area

Briefly describe the finish of the race. Discuss the athlete's time. Congratulate the athlete on a great run. Give combined times if available. Get the spectators involved with cheering the athlete on.

Other information to announce

Throughout the competition, announcements should be made about where events or places which are not obvious; i.e., first aid station, lost and found, meals, awards, clinics, etc. The overall schedule of events can be announced, as well as interviews being held if applicable.

GLOSSARY OF ALPINE SKIING TERMS

ABSORPTION

Flexion/extension movements of the body to absorb and even out the pressure variations on the skis that result from the dynamics of the turn or terrain variations.

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 and examples are running, hiking, and bicycling.

ALPINE RACING

Slalom, Giant Slalom, Super G, and Downhill events.

ANAEROBIC TRAINING

Training to improve the body's energy system which functions at a level of intensity so high that oxygen can no longer be converted to energy rapidly enough so the body must rely on stored energy. Requires a maximal effort of up to one minute duration. Examples are interval running, hill sprints, interval bike hill sprints.

ANGULATION

Creating lateral angles with the knees, ankles, hips, and upper body to balance or turn on an edged ski.

ANTICIPATION

A movement in preparation for turning, during which upper and lower body segments are brought into a twisted relationship. The muscles that are stretched as a result are quicker and stronger in contracting and causing movement.

ARC

The track of a turn remaining on the snow.

BANKING

Inclining or leaning the entire body to put the ski on its edge.

CAMBER

The arc built into the profile of the ski, that allows a skier's weight to be evenly distributed over the running surface 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

A turn during which the skis skid at the same time on corresponding edges. (Corresponding means 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 from the inside of one turn to the inside of the next 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 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, that gravity and terrain would allow a ball to roll down a 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 which 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, and knee.

FORERUNNER

A skier that skis a race course before the competitors do to determine if the course is ready for competition.

GARLAND

A series of direction changes that do not lead the skier to reverse direction across the fall line. (A direction change is to be understood as a deviation from a straight-line motion.)

GLIDE

Skiing on as flat a ski as possible to carry speed.

GROOMED

Snow that has been mechanically prepared.

GUIDE

To direct motion by physical action; to use muscular movements to direct motion.

HIP PROJECTION

A movement of the hips forward or to the side to produce up unweighting or to impart lateral momentum. Hip projection may be used to augment rotary movement to start a turn.

INCLINATION

Deviation from a vertical body position. This term is usually used to describe the overall appearance of the body in relationship to a vertical reference.

INDEPENDENT LEG ACTION

The ability to transfer weight from one foot to the other so that the skier can stand, turn, balance, and regulate pressure on one ski at a time.

INITIATION PHASE OF A TURN

In a new turn, the point at which the edge change is made to the inside edge of the outside ski. (It may occur simultaneously with, or follow weight transfer.)

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 seven 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.

MATCHING

The movement toward aligning the direction of the skis after they have been brushed or stepped into a wedge position. Matching implies that the skis are brought either from positions of divergence or convergence toward a parallel relationship.

OPEN GATE

A gate that is set horizontal to the direction of the course.

OUTSIDE SKI

The ski farthest from the center of the turn. It controls the arc of the turn.

PIVOT

Twisting a flat ski without a change in direction of travel.

POLE PLANT

Used as timing device to start a turn, and it can assist in keeping the skier balanced.

PREPARATION PHASE OF A TURN

The skier is setting up to start a new turn. This is when the weight is transferred from the downhill ski to the uphill (new outside) ski.

PRESSURE

Weight on the ski.

PSIA

The abbreviation for Professional Ski Instructors of America.

REBOUNDING

The recoil, or effect of springing back, in response to the forces of compression exerted on the body, the skis, and the snow.

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 define where to start a turn.

ROTATION

Turning the body in order to turn the skis in the same direction.

SCRAPE

The process of removing excess ski wax from your bases with a plastic scraper.

SEEDING

The process of creating a start order based on the competitors' National Points.

SHELL

The outer plastic portion of your ski boot.

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 the skis sideways down the hill by releasing the edges and flattening out the skis.

SKI FLEX

The bending of an edged and pressured ski.

SLIPPING

A sideways movement of the skis on snow.

SPEED EVENTS

Downhill or Super G.

STEERING PHASE OF A TURN

Increased edging and increased pressure direct the turning ski through the arc of the turn.

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.

T.D.

Abbreviation for Technical Delegate, who represents the USSA and FIS on the race jury and also is chairperson of the jury. This person makes certain that the race is safe and properly conducted.

TECHNICAL EVENTS

Slalom or Giant Slalom.

TECHNIQUE

The choice made among the movement options available to accomplish a given goal.

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.

TUCK

The aerodynamic position that Downhill and Super G racers use to achieve more speed.

TURNING POLE

In a gate, the pole around which the racer skis.

UNWEIGHT

Decreasing the weight or pressure on skis.

WAND

The device in the starting gate that is located at knee level that activates the timing equipment.

WAX ROOM

A place set up by your coaches and parents where you can work on your skis.

WEIGHT TRANSFER

The shifting of pressure, from body weight, from one ski to the other.

WEDGE

A position of the skis on the snow where the tips are close together and the tails are fanned out. A good stable position for beginners.

WORLD CUP

Premier Alpine racing circuit.

LIFE BENEFITS OF SPECIAL OLYMPICS

Special Olympics can provide opportunities to develop other skill areas in addition to sports and fitness skills. These areas include life, social, vocational, and transitioning skills. Coaches can play an important role in the development of these important skills.

LIFE SKILLS

Money management --

At a Special Olympics event, give athletes the opportunity to buy a meal, T-shirt, etc. Involve them in the choosing and purchasing of uniforms and equipment.

Personal grooming habits --

Establish team guidelines. Encourage athletes to wear clean clothes, groom their hair, brush their teeth, shower after practice, wash their own uniforms, etc.

Transportation access --

Teach athletes how to ride a bus, use the subway, and ride a bicycle. Enable athletes to get out and interact with the community.

SOCIAL SKILLS

Negotiation --

Enable athletes to negotiate with parents and employers for changes in their family and work schedules in order to participate in a Special Olympics event.

Relationship building --

Enable athletes to interact with volunteers, peer coaches, and teammates, to get along with others, and to make new friends.

Self-esteem and worth --

Provide opportunities and reinforcement for each athlete to contribute to the group as well as to improve individual skills.

VOCATIONAL SKILLS

Commitment and dedication --

Ask athletes to make a commitment to themselves and the team to attend practice and competition. Employers value reliability and dependability.

Focus and concentration --

Focusing on a specific skill in a sport relates to performing a specific skill and learning a new task on the job.

Working with others --

Teamwork learned through team sports relates to working with others in the job setting.

Stamina and fine and gross motor skills --

Sports participation can improve stamina and complement fine and gross motor skills required to be successful on the job.

TRANSITIONING SKILLS

Change --

Sports training improves athletes' abilities and allow them to progress to higher levels of sports participation. This often means adjusting to changes in training and competition sites, teammates, and rules. Athletes who play more than one sport also must make these same adjustments from sport to sport. Learning to adapt to change prepares the athlete for similar changes when moving from school to school and from student to adult.

CLOTHING

Selection of proper clothing for alpine skiing and racing should be based on safety first, comfort and function second, and all at affordable prices. It is important that warmth and comfort come before style and fashion. The winter season is characterized by many extremes in weather and the “Wind Chill factor. Movement in alpine skiing increases the effect of the cold. The two most important principles of dressing for skiing are to maintain body heat and keep dry. Clothing and accessories should be combined to provide warmth and protection from moisture, wind, cold, and sun. The amount of still air trapped in the clothing determines how warm the skier will feel. Layering clothing will provide more trapped air and increase warmth.

Under-Layers

The best LONG UNDERWEAR is made of either capinene or polypopelene. These are both synthetic fibers that allow the moisture to evaporate from the skin while keeping the skier warm even during vigorous exercise.

One pair of SOCKS, preferably of polypropelene or wool, is recommended. It is not a good idea to wear an extra pair of socks for warmth as this will affect the fit of the boots.

TURTLENECK SHIRTS worn over long underwear provides good layering. The snug neck and wristbands hold in the body heat. A turtleneck is also good for covering the lower face on cold days.

Wool SWEATERS are best! A heavy sweater is good for cold weather. Padded racing sweaters are expensive and may be considered only if the athlete has reached the advanced ability level.

PICTURES

Outer-Layers

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 pants are hard to find at a reasonable price, consider warm-up or wind pants over long underwear.

INSULATED SKI PANTS and WARM-UPS provide additional warmth and protection on cold days. Bib-overall ski pants provide extra warmth and are great for keeping athletes dry. Zippered warm-ups are often good to wear over ski pants during cold racing days because they may be taken off at the top of the course for the ski race.

JACKETS protect the torso from wind, moisture, and heat loss. There are many good inexpensive, waterproof jackets on the market today made with either Fiberfill, Polarguard, or Gore-Tex. 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 OR MITTENS that are specifically designed for alpine skiing are essential. The hands are the first part of the body to get cold, and having cold hands is not conducive to successful skiing. Mittens are warmer, but gloves are more versatile.

A HAT which covers the head and both ears should be worn to retain body heat.

GOGGLES OR SUNGLASSES protect the eyes from the glare of the sun reflected off of the snow and should be worn at all times. Sunglasses or goggles also block the wind and improve visibility when it is snowing. Goggles, not sunglasses, should be worn when athletes are training or racing in gates because they provide proper eye protection. Apolarized goggle lens offers the best eye protection.

It has been stressed to dress properly for cold days, however, it is equally important to dress appropriately on warmer or spring-like days. Over-dressing may cause undue heat fatigue, therefore, on warmer days dress with lighter layers.

Accessories

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

A SKI MASK/SCARF will keep the face dry and warm.

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

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.

Ski HELMETS are safety equipment and must fit properly to protect an athlete from head injury. Helmets are recommended if the coach, athlete and parents determine that the athlete needs additional protection for the head area. Helmets are required for all athletes who train for and compete in the “downhill” event.

EQUIPMENT

SKI BOOTS are like dancing shoes, if they don't fit well you don't dance well! Boots are designed to give the feet support, but they must also be comfortable. It is very important that boots are not too big or too small. For a perfect fit, follow these steps:

- Pull out the bootliner.
- Have the athlete put his/her foot in the shell, stand up, and slide the foot forward so the toes just touch the inside front of the shell.
- There should be a half-inch to inch gap between the heel and the back of the shell.
- Put the foot in the liner and stand up.
- There should be a little room for the toes; the rest should be a snug fit.
- Put the liner back in the shell.
- The boot should fit snugly with one pair of warm socks.

Bend the knee and ankle forward, pressing the lower leg against the tongue of the boot. The boot should bend or “flex” while keeping or holding the heel in the heel pocket. This forward action of the legs and ankles is necessary for good balance and good skiing. Utilize the knowledge of the local ski shop employees in selecting boots. Make certain the bindings are adjusted properly to the boots on the skis.

SKIS work best when they are purchased to suit the individual. Every ski has four characteristics which determine how it will perform for different people with different needs:

- *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.
- *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.
- *Sidecut* is the dimension of a ski whereby the width of the tip and tail is wider than the middle of the ski.
- *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.

IN selecting skis, it is important to get advice from experts. One pair of skis is suitable for all types of skiing and racing.

BINDINGS hold the ski boots to the skis and allow a skier to come out or off of the skis if the skier gets in trouble. Binding needs will depend on skill level, strength and weight of the athlete. Always get advice when selecting ski bindings. Always have the binding settings checked at the beginning of each season, and periodically throughout the season.

POLES are important for timing and balance. They are important for timing and balance. 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.

THE VENUE

A “venue” is the area a coach or program sets aside for training and racing purposes. Safety should be the primary consideration when establishing a training or racing venue. Always make sure when planning a venue for on-snow activities to properly fence the entire perimeter of the venue. In addition, provide the proper padding on objects like trees, snowmaking equipment and lift towers. If fencing the entire venue is not possible, make arrangements to carefully view the facility to make sure the areas surrounding the venue are safe and secure. All on- and off- hill training courses need to match a group's ability level. In a structured program athletes will learn responsibility and appropriate behavior which enable them to function safely. It is important to have a flat platform for the Start area. Be sure there is a safe and adequate run-out at the Finish Line.

- In discussing venue, one needs to take the following ski-related situations into consideration.:
- Dry-land training (group activities with coach, home maintenance program.
 - On-snow technical training (Ski School)
 - On-snow ski racing events (10 Meter Walk, Glide Event, Slalom, Giant Slalom, Downhill)
 - On-snow gate training/course setting

COURSE SETTING

The most important part of course setting is to create a course which allows the athlete to ski as fast and as safely as possible. This means that the course setter, not the athlete, is responsible for controlling speed by setting the course according to the ability level of the athletes and the terrain of the venue. Poles, or gates are used to define the course. Keep in mind that the best racer wins on all types of courses, but the lower ability athletes have a better chance of finishing an easier course.

In order to get more people interested in alpine ski racing, make sure that fun is the main motivation in practice and execution of the sport. Fun, however, can only exist if success is achievable. Success is defined as finishing a course, and finishing a course should always be within reach. It is the course setter's responsibility to set a course which guarantees a high percentage of finishers. Basically, if the terrain is difficult, set an easy course; If the terrain is easy, set a more challenging course.

Before setting, it is important to make a pre-inspection of the race terrain. The following should be considered:

- q Is the planned course appropriate for the athletes?
- q Is the terrain used most effectively?
- q Have snow cover and conditions been observed?
- q Is the course set to the caliber of the competition?

Use common sense and good judgment. Be sure courses are set to test those skills of the particular event. The following are guidelines for the skills tested by each event and setting the course distance from turning pole(s) to outside pole(s).

<u>Event</u>	<u>Distance Rule</u> <u># of Ski Lengths</u>	<u>Skills Tested</u>	<u>For Outside Gate</u>
Slalom	3	quickness, agility	4-6 meters(closer to 6)
Giant Slalom	3.5	timing, line, patience	4-8 meters (closer to 8)
Downhill	3-4	timing, line, speed	8 meters minimum

The only way to improve course setting skills is to set more courses. Set short courses and ski them. Remember, what can't be skied should not be set. All Special Olympics International Sports Rules for Alpine Skiing must be observed in every respect when setting courses .

COACHES' SAFETY CHECKLIST

- Wear non-breakable goggles and never wear sunglasses in course training or racing.

- Use the side of the trail for:
 - Speaking to the athletes
 - Walking up or down the hill.

- Obey trail markers

- Make sure trails are selected based on the athlete's ability - If you have not seen an athlete ski previously, always begin on a beginner terrain before moving to more difficult slopes.

- Stress a stretching (flexibility) routine before skiing.

- Cooperate with the ski patrol and learn where the ski patrol headquarters is located in relation to the area where athletes will train or race.

- Make sure the athletes have their equipment checked by a certified ski shop prior to the season. The shop will take each skier's ability and weight when setting the bindings.

- Be aware of each athlete's fatigue, especially toward the end of the training session. Always stop if this is a concern.

- Be aware of other skiers on the slope.

- Make sure athlete's clothing is adequate for the weather conditions. This includes a hat, gloves, ski parka, ski pants, socks, goggles and long underwear.

DEVELOPING A SEASON PLAN

In Special Olympics, where sports and training and competition programs are offered on a year-round basis, alpine ski coaches, athletes, and parents should be involved in summer sports programs to enhance their skiing abilities. Therefore, always consider the ski program to include sport activities during the months when a skier is not able to train on the snow.

The following sample season plan begins with the month directly following the end of the season.

APRIL/MAY

1. Review the following with the ski area staff involved with the program.

How the season went in terms of training, races, rentals, lift prices, ski area personnel support, athlete behavior, ski school involvement.

What could be proposed for the following season for lift prices, rental prices, ski school lessons, training times and competition needs.

What areas may be improved upon?

Is there a less busy time when training could take place?

Would we be able to save money if we came at another time - for all facilities or individually: lifts, lessons, rentals?

What can be done for the ski area in the future: advertising, special events.

What other areas may help the program to be successful; e.g. parent ski lessons, reduced ticket prices for coach, family or Unified skiing partners program.

2. Begin weight training program for athlete strength building (2 or 3 times per week).

3. Begin a team sport activity such as basketball, soccer, volleyball, softball.

4. Make sure ski equipment is properly stored:

Tune skis and apply a layer of ski wax

Turn down bindings

5. Complete and send out athlete's ski season evaluation to athlete and parent.

JUNE/JULY/AUGUST

1. Plan a summer picnic and a hike with athletes or plan a field sport activity (i.e. soccer or volleyball game).
2. Discuss plans to buy ski equipment at summer sales
3. Review weight training programs (athletes should still be working toward strength building.)
4. Discuss other dry-land training options not offered to athletes involved in team or other Special Olympics training or competition programs.

SEPTEMBER/OCTOBER/NOVEMBER

1. Plan a team meeting with parents to discuss fall dry-land training, equipment, and the winter program. Include some FUN dry-land activities and team sports during the meeting. Invite any potential new member for your winter program to this meeting.
2. Discuss ski sales or organizing a ski swap on the Local or State Level.
3. Dryland training programs should begin no later than the middle of October.
4. Invite new volunteers and potential coaches to this meeting.
5. The Fall is a great time to plan fundraising activities.
6. Plan to get athletes and coaches on snow as early as possible:
 - q equipment must be adjusted to correct settings.
 - q season or training passes have been purchased.
7. Schedule pre-season meeting with the ski area to review objectives and costs for the season.
8. Continue weight training programs - these may need to be adjusted with athletes who are participating in school fall sports programs.

DECEMBER/JANUARY

1. Involve athletes in 8 or 10-week training programs.
2. Encourage athletes to follow a home training program - physical fitness activities designed to take place in the home under adult guidance.
3. Change weight training programs to a winter maintenance program - one or two days per week.
4. Check equipment periodically.
5. Check Ski Swap sales.
6. Train new volunteers and coaches. Involve coaches in a training school update or certification.
7. Plan a fundraiser
8. Attend Chapter Games.

FEBRUARY/MARCH

1. Attend Local or Area competitions. (Most states will hold Chapter games during these months.)
2. Continue home training programs.
3. Continue winter weight programs.
4. Provide a winter fundraiser – use the local ski area or Chapter games as a venue on which to hold this event.

Appendix 1

Level I - Beginner

<u>Test</u>	<u>Sum</u>	<u>#1 Ski Area Awareness</u>
_____	_____	Knows "GREEN" or easiest trail sign
_____	_____	Knows "CLOSED TRAIL" sign
_____	_____	Understands the objectives of a ski lesson
_____	_____	Learns, demonstrates courtesy to other skiers
<u>Test</u>	<u>Sum</u>	<u>#2 Dryland or Inside Activity</u>
_____	_____	Buckle boots independently
_____	_____	Puts boots in bindings
_____	_____	Holds ski poles properly
_____	_____	Walks with skis in a straight line
_____	_____	Walks with skis in a circle
_____	_____	Side steps with skis
_____	_____	Places skis in a wedge position
_____	_____	Herringbones with skis
<u>Test</u>	<u>Sum</u>	<u>#3 Technical Development</u>
		Flat to gentle slope on-snow activity
_____	_____	Walks with skis in a straight line
_____	_____	Walks with skis in a circle
_____	_____	Pushes with poles and glides
_____	_____	Side steps on flat terrain
_____	_____	Side steps up gentle slope
_____	_____	Herringbones up gentle slope
<u>Test</u>	<u>Sum</u>	<u>#4 Technical Development</u>
		Gentle to novice slope activity
_____	_____	Stands up after falling
_____	_____	Can re-fasten skis on gentle terrain
_____	_____	Can re-fasten skis on novice terrain
_____	_____	Performs a straight run
_____	_____	Performs a gliding wedge
_____	_____	Performs a breaking wedge
<u>Test</u>	<u>Sum</u>	<u>#5 Tactical Development-Gate Training and Competition</u>
		(see section on Official SOI Rules for Alpine Skiing)

_____	_____	Understands the start command
_____	_____	Understands the finish area
_____	_____	Can perform 10 meter walk independently
_____	_____	Can perform the glide event independently

Level II - Novice

<u>Test</u>	<u>Sum</u>	<u>#1 Ski Area Awareness</u>
_____	_____	Can identify "BLUE" (more difficult) trail sign
_____	_____	Demonstrates safety while skiing
_____	_____	Can recognize a member of the ski patrol
_____	_____	Rides the following lift(s) with assistance: (please circle) rope tow, t-bar, pona, surface, and/or chair lifts

<u>Test</u>	<u>Sum</u>	<u>#2 Technical Development - Wedge Turns</u>
_____	_____	Performs wedge turn to a stop - left wedge turn
_____	_____	Performs wedge turn to a stop - right wedge turn
_____	_____	Performs two wedge turns simultaneously
_____	_____	Performs four or more wedge turns simultaneously
_____	_____	Performs wedge turns entire length of green (easiest) trail

<u>Test</u>	<u>Sum</u>	<u>#3 Tactical Development - Gate Training/Comp.</u>
_____	_____	Properly moves into race start position unassisted
_____	_____	Properly follows start procedure
		a. Moves poles over starting wand
		b. Moves through start wand on start command
_____	_____	Trains a five-gate slalom course unassisted
_____	_____	Trains a five-gate giant-slalom course unassisted
_____	_____	Races five-gate giant-slalom course unassisted
_____	_____	Trains a four-gate downhill course unassisted
_____	_____	Races a four-gate downhill course unassisted
_____	_____	Can get up after falling and finish the training course
_____	_____	Can get up after falling and finish the race course

Level III - Intermediate

<u>Test</u>	<u>Sum</u>	<u>#1 Ski Area Awareness</u>
-------------	------------	------------------------------

_____	_____	Can identify a ski school instructor
_____	_____	Can locate the ski patrol buildingheadquarters
_____	_____	Can ski in group lessons (4-8 people)
_____	_____	Can ski independently/individually at ski areas
_____	_____	Can identify "BLACK" (most difficult) trail signs

Test Sum #2 Technical Development - Christy Turns

- Skis move from wedge to matched (parallel) position at end of turn - wedge christy
- Performs two wedge christy turns simultaneously
- Performs four or more wedge christy turns simultaneously
- Matches skis at or before fall line (start of the turn)
- Uses pole plant between turns
- Performs four or more wedge christy turns with pole plant
- Performs wedge christys entire length of green (easiest)
- Performs wedge christys entire length of blue (more difficult)

Test Sum #3 Tactical Development - Gate Training/Competition

_____	_____	Inspects training course with coach
_____	_____	Inspects race course with coach
_____	_____	Trains 15-gate slalom course unassisted
_____	_____	Races 15-gate slalom course unassisted
_____	_____	Trains 15-gate giant slalom course unassisted
_____	_____	Races 15-gate giant slalom course unassisted
_____	_____	Trains 10-gate downhill course unassisted
_____	_____	Races 10-gate downhill course unassisted

Level IV - Advanced

Test Sum #1 Ski Area Awareness

_____	_____	Can ski varied terrain in control
_____	_____	Can ski mogul runs in control
_____	_____	Can ski varied conditions in control: (please circle) ice, heavy snow, powder

Test Sum #2 Technical Development - Open Parallel

_____	_____	Skis are matched throughout the turn
_____	_____	Performs four or more open parallel simultaneously
_____	_____	Performs short radius (slalom) turns consistently
_____	_____	Performs long radius (giant slalom) turns consistently
_____	_____	Performs long to short or short to long turns following coach's

_____	_____	example
<u>Test</u>	<u>Sum</u>	<u>#3 Technical Development - Parallel</u>
_____	_____	With skis moderately close together (closer than shoulder-width) can make four or more parallel turns
_____	_____	Can ski length of blue trails with linked parallel turns
_____	_____	Can ski black trails
<u>Test</u>	<u>Sum</u>	<u>#4 Advanced Exercises</u>
_____	_____	Balance Drills: javlin turns, one ski, no poles
_____	_____	Edging Drills: sidslipping, hockey stop, traverse
_____	_____	Weight Transfer Drills: flexion.extension, wedge turns, various turn shapes, hop turns
_____	_____	Stepping Drills: parallel step, 1000 steps, converging step, diverging step
<u>Test</u>	<u>Sum</u>	<u>#5 Tactical Development/Gate Training and Comp.</u>
_____	_____	Inspects course without coach
_____	_____	Understands "racers line," racers path through course
_____	_____	Skis giant slalom "drill courses"
_____	_____	Skis slalom "drill courses"
_____	_____	Trains 20-gate slalom course
_____	_____	Races 20-gate giant slalom course
_____	_____	Trains 20-gate giant slalom course
_____	_____	Races 20-gate giant slalom course
_____	_____	Trains 15-gate downhill course
_____	_____	Races 15-gate downhill course

MATERIALS

Publication

Coaching Young Athletes from Human Kinetics Publishers, Inc., Box 5076, Champaign, Illinois 61820.

Ski Racing for Children by Bergstrom and Ross, U.S. Ski Team Training Manual, and the Alpine Skills Achievement Manual by Foster; all from United States Skiing, Box 100, Park City, Utah 84060.

Ski Instruction for the Developmentally Disabled by Lawrence Levy, 65 Rimfire Circle, Reno, Nevada 89509.

Bold Tracks by Hal O'Leary, winter Park Ski Area, Winter Park, Colorado 80482.

Child-Centered Skiing American Teaching System from the Professional Ski Instructors of America, 133 South Van Gordon Street, Lakewood, Colorado 80228.

Video Tapes

Special Olympics ski coaching Videos I and II, SOI 1325 G St., NW, Suite 500, Washington, D.C. 20005.

Ski Race Training, by Billy Kidd, Billy Kidds's Ski Racing Center, 2305 Mt. Warner Circle, Steamboat Springs, CO 80487.

ORGANIZATIONS

NASTAR specializes in recreational ski racing and offers races in which Special Olympics athletes may participate. It also has information on a handicap system and how it compares to the U.S. Ski Team. Contact *NASTAR* at 402D Pacific Ave., Aspen CO 81611, (303)449-7961.

United States Skiing Association (USSA) includes United States Ski Association's Youth Ski League, USSA's Junior Olympic Programs, and United States Ski Team. It specializes in the following competition: alpine, freestyle, cross country, jumping and disables skiing. Contact USSA at P.O. Box 100, Park City, UT 84060, (801)649-9090.

Ski Industries of America (SIA) specializes in learn-to-ski programs and ski lessons at participating retailers and areas. Contact SIA at 8377-B Greensboro Dr., McLean, VA 22102, 1-800-87-GO SKI or (707) 556-9020.

National Handicapped Sports (NHS) specializes in learn-to-ski and race programs for the physically disabled. Contact NHS at 2246 South Albion ST., Denver, CO 80222, (303)759-8123.

Professional Ski Instructors of America (PSIA) is the certifying body for ski instructors in the United States. Contact PSIA at 133 South Van Gordon, Suite 204, Lakewood, CO 80228, (303)987-9390.

National Collegiate Athletic Association (NCAA) specializes in Division I college Alpine and Cross Country ski racing. Contact NCAA at 6201 college Blvd., Overland Park, KS 66211-2422, (913)339-1906.