
Teaching Visually Impaired Skiers

What is a Visual Impairment?

A visually impaired (VI) skier has some degree of loss of vision and when skiing, requires a guide to help guide the skier down the hill safely. Not all VI skiers are completely blind. More than 90% of persons who are legally blind have some eyesight. Diabetes is one of the most common causes of blindness in the U.S.

Common Disabilities associated with VI Skiers	Common Medications to Consider
<ul style="list-style-type: none">• Blindness• Cataracts• Diabetes mellitus• Retinopathy• Glaucoma• Macular Degeneration• Strabismus• Visual Field (peripheral vision, tunnel vision, bilateral vision, myopia)	<ul style="list-style-type: none">• Anticonvulsants (seizures)• Antiemetic (nausea, vertigo)

Student Assessment and Equipment Fitting

Some key things to consider when assessing a visually impaired skier:

- Find out the degree of the visual impairment. What is the skier able to see? Check distance, forward/lateral vision, fine focus/shadows, darkness/lightness. Test both inside and outside.
- Assess the skier's walking. If the student uses his/her feet as "feelers" this can affect stance.
- Find out if the cause of the vision impairment was organic or traumatic. There may be hidden complications involved that could inhibit the skier's abilities. Check for secondary or hidden disabilities that may impact the person's skiing.
- Is the person prone to seizures? If yes, a harness should be used on the chair lift.
- How long has the skier had the impairment? Someone who has recently lost vision may have more challenging balance problems when skiing.

Skis

The ski is a normal alpine ski. Use ski shop recommendations for able-body skiers as a guide for similar size VI skiers.

Boots

Should be snug but not too tight. Objective is to get an athletic stance over a flat ski. You may need to cant with lifts or wedges inside the boot to obtain this. (one-half inch max)

Bibs

"Visually Impaired" and "Guide" bibs alert others on the hill. Both the skier and the guide should wear the bibs.

Bamboo poles

Used for guiding. The poles provide immediate feedback and help the skier feel instruction.

Reins/Tethers

Reins connect to the skier's ski bra and allow the instructor to control speed and shape turns.

Ski Bra/Spacer Bar

A device that connects the ski tips to stabilize the tips of the skis. Reins can be connected to the rings on the ski bra to provide additional support. A spacer bar is used between the skier's feet for lateral support. If such devices are used to help establish special awareness as the person learns, remove the adaptive equipment as soon as possible so the skier does not become dependent on them. Never allow a skier to slide backward while wearing tip stabilizers!

Protective Gear

Check medical form to see if student is required to wear a helmet. Students with shunts must wear helmets. Take special precautions to ensure that the eyes are protected (hat, sunglasses, goggles).

VI-Specific Teaching Techniques

When teaching a VI skier, follow the basic ATS progressions. Balance will be a key issue. Always describe and orient your student to the environment.

❖ Remember to maintain verbal contact at all times. You are the person's eyes in an unknown and unfamiliar environment.

Communicating

One of the most important aspects of communicating with your student is consistency. Discuss the guiding options with your student and decide which one is best for the two of you.

- Use a firm confident voice. Use a normal voice and tone.
- Before going onto the hill, determine emergency commands like "slow down," "sit down," and "stop."
- Decide upon a reference system such as "clock," "grid," "descriptive" or a combination.
- Directional commands are as follows: "right turn, left turn," or "turn, turn, turn." "Hold, hold, hold" can indicate traverse. Keep them short and simple for on the slope.
- Tapping your ski poles can provide a constant connection for your student to cue in on.
- Remember to always maintain verbal contact with the student.

Guiding on Foot

From the time you meet your student, you are responsible for helping guide the student around the ski area. *Always ask your student how you should guide.* Some options are:

- Student holds onto instructor's shoulder and follows behind.
- Instructor holds student's elbow and guides from the side.

Be sure to talk the student around obstacles and through crowds. Don't just pull or push the student around. Do not leave your student standing alone, even for a minute.

Guiding on Skis

Guiding from the front, skiing backwards

This is the position you will most likely guide/teach from with new skiers. This position allows the instructor to stay downhill of the student as well as maintain good voice contact.

Guiding from the side

Used with students with peripheral vision. This can be difficult on a crowded slope because you need to look behind to check for oncoming skiers thus taking your eyes off the student briefly.

Horse and buggy

Can be used once your student has shown the ability to do at least wedge turns. Use bamboo poles at hip level to indicate direction change by slight twist of the pole, or turn initiation by pushing on left side to turn right. This technique may promote unwanted hip rotation, so be sure you only use on a limited basis.

Guiding from behind

This position allows your voice to be heard well and allows a good vantage point to observe the student and the crowd on the slope.

Guiding from the front, skiing forward

This technique is generally used by advanced skiers and by racers. As the instructor, you must turn your head over your shoulder to project your voice.

Chairlift Loading and Unloading

Safety is the key!! If needed, ask the lift operator to slow down or stop the chair. For more information about chairlift procedures, including emergency procedures, see Chapter 2, "Safety Procedures and Policies" in the *Outdoors for All Volunteer Manual*.

Keys to success:

- Explain to the student what will happen and what you need the student to do.
- Discuss and practice counting for when the student should sit down.
- Communicate with the lift operators at both the top and the bottom of the lifts. Never assume they know or remember what you need. Report any problems with lift ops to your Lead Volunteer.
- The first time the student rides the chairlift, slow down or stop the lift when loading and ask the lift operator to warn the operator at the top of the lift. Stop the lift for unload.



Lesson Plan: Introduction to Equipment

Goals

- Introduce the equipment, allow the student to feel the equipment. Explain functional aspects and safety features.
- Allow the student to gain a good understanding of how the equipment works.
- Teach appropriate body position — neutral athletic stance.
- Explain the safety code.

Teaching Tips

- Keep it simple! When introducing skis for the first time, keep the technical talk to a minimum. When they go from skidded turns to carved turns, then start to talk about ski technology.
- Discuss the guiding methods with the student and come to an agreement on which to use. Ultimately, let the student decide how to be guided. Consider terrain and weather conditions as well as crowds on the slopes. Choose the most effective means of guiding for the conditions.
- Take time to get to know your student and create a bond of trust.

Exercises

- Show your student the boots and how the buckles work.
- Show your student the skis, warning of sharp edges.
- Show your student their bindings.
- Practice getting in and out of skis.
- Demonstrate the appropriate body position and balance. This will most likely require touching the student and moving the body into the correct positions. Ask first and explain what you are doing!
- Take time to set up equipment properly to ensure that student is balanced over a flat ski.

❖ NOTE: Adapt the exercises to the ability of the student. Not all exercises are appropriate for all visually impaired skiers. Use common sense.

Emergency Situations

Discuss what to do in an emergency or potentially dangerous situation. Agree to a “code word,” such as “SIT DOWN.” When an emergency situation arises, yell “SIT DOWN” and the student should immediately drop in place. You may want to practice this in a safe area.



Lesson Plan: Flatland Drills

Goals

- Become familiar with the equipment on flat terrain.
- Focus on developing good balance, good body position.
- Learn how to move around on flats.
- Learn importance of a flat ski.
- Learn side step.

Teaching Tips

- ***Don't be afraid to spend extra time on the flats!*** Run through all of the movement patterns in the safe environment before moving to the chair lift.
- Introduce the safety code.
- Emphasizing pressure on the cuff of the boot with the shin can help keep your student out of the “back seat.” Explain how to flex at the ankle, knee, and hip. Hands should be out in front of the body at hip level.
- In the beginning use “toes and heels” instead of “tips and tails.”
- Remember to use proper guiding techniques agreed to with your student while walking around the ski area.
- Hands on molding will probably be necessary, be sure to get permission before touching your student.

Exercises

- Walk around in boots.
- Practice getting in and out of bindings.
- Walk around with one ski on. Follow the leader and then switch feet.
- Turn around in place: tips together then tails together. Emphasize rotating with the foot at the center.
- Practice side step and herringbone.
- Pole along to propel on the flats.

Skills Concept (BERP) Review

- ◆ **Balancing movements** — Promote small steps to keep mass over feet.
- ◆ **Edge-control movements** — Emphasize for side step and for walking around in circles.
- ◆ **Rotary movements** — Look for active “inside leg” steering even when walking around.
- ◆ **Pressure-control movements** — Talk about feeling the whole foot when walking around on the flats.



Lesson Plan: Straight Run

Goals

- Add movement to flatland drills by having skier do a straight run.
- Challenge the skier's balance while focusing on maintaining correct body positioning and athletic stance while moving.

Teaching Tips

- Maintain close contact and a confident tone. Try to work in quiet areas away from noisy crowds.
- Describe everything that is new to the student, including the slope, the sounds, the chairlift.
- As student becomes more comfortable, increase speed and length of the straight run.
- Review how equipment is fitting now that the student has spent some time in it.
- Hands forward will help keep student out of the back seat. Emphasize ankle flex.
- Review wedge position from walking around drills. Use your students hands as needed to show ski position.
- Use static drills to “spread the snow” into wedge, then add to the straight run.

Exercises

- Straight run to a natural stop.
- Straight run with steps to turn out right and left to stop.
- Straight run change ups. Gliding, braking wedge.
- Stop and go.
- Herringbone and side step to gain elevation.

Skills Concept (BERP) Review

- ◆ **Balancing movements** — Tall relaxed stance. Keep hips over feet.
- ◆ **Edge-control movements** — Minimal for straight run and increased with braking wedge.
- ◆ **Rotary movements** — Emphasize foot steering to step out turns.
- ◆ **Pressure-control movements** — Pressure on the whole foot and shin to cuff contact will help student stay out of the back seat.



Lesson Plan: Wedge Turn (on the flats)

Goals

- Learn how to use turns to change direction, control speed and to stop.
- Link wedge turns.
- Learn to ride the chair lift.

Teaching Tips

- Do not move to the chairlift until the student can comfortably make turns and stop.
- Use consistent verbal commands. Work to develop timing, rhythm, a flow through verbal commands. Use verbal cues to vary the size of the turn radius.
- Use your student's hands as needed to show ski position.
- Student loads on lift operator side.
- Have the lift operator stop the chair so your student can feel the chair. Use "3-2-1-sit" to load.
- Have lift operator slow if needed to unload. "Use 3-2-1-stand" to unload. Safely guide out of the landing area as soon as possible.

Exercises

- From straight run, add small turns in both directions. Begin by looking in direction of the turn. Increase amount of turn as it becomes more comfortable.
- From a straight run turn to stop.
- Follow Me — have the student follow your tracks in a gliding wedge. You may need to employ a technique such as two-point hold or horse and buggy if "follow me" does not work.
- Mock practice loading chair lift.
- Uphill Christie Fan progressions — allow student to become comfortable with turning uphill to slow down and stop.
- Garlands — focus on either turn initiation or finishing the turn. Show how leaning forward and looking downhill starts a turn and how returning to neutral position helps end a turn.

Skills Concept (BERP) Review

- ◆ **Balancing movements** — Maintain balance while moving.
- ◆ **Edge-control movements** — Maintain flat ski, until speed and pitch require increased edge angle.
- ◆ **Rotary movements** — Turning forces as close to the snow as possible.
- ◆ **Pressure-control movements** — Pressure on cuff of boot to aid turn.



Lesson Plan: Wedge Christie Turn

Goals

- Control speed using turn shape and terrain. Increase size and variety of turns, moving to more difficult terrain.
- Match skis at or about fall line.
- Introduce pole touch.
- Initiate turns faster, switching between medium– and short-radius turns.
- Increase fore/aft pressure movements and countering during turns for more active crossover.

Teaching Tips

- Use consistent verbal commands and demonstrate using your hands. Use hands on the skier to put the body in the correct position, but remember to ask permission and explain what you're doing.
- When introducing a new skill choose terrain for success.
- Slight rise to initiate and slight sink to steer. Extend off the outside leg and direct the center of mass into the turn.
- Work a safety tip into the lesson whenever appropriate.
- If the inside ski hangs up or a step is needed to match skis, promote inside ski tip and knee lead into the turn.
- To promote earlier matching, practice narrower wedge turns on beginner terrain, then move to slightly steeper terrain.

Exercises

- MILEAGE!! Practice variety of turn shapes.
- Traversing, traversing with small steps, traversing with side slip.
- Uphill Christie Fan progressions — experiment with body positions.
- Falling leaf — try leaning too far forward, too far back, centered and notice differences.
- Side slipping — begin experiments with edging. The body stays down the hill.
- Garlands — focus on beginning and ending turns correctly.
- Skating on the flats.

Skills Concept (BERP) Review

- ◆ **Balancing movements** — Quiet upper body aids in balance recovery. Keep mass over feet.
- ◆ **Edge-control movements** — Create edge angles with foot, knee, hip.
- ◆ **Rotary movements** — Promote foot steerage.
- ◆ **Pressure-control movements** — Leg contact with boot cuff. Start to experiment with rise and sink and how that affects turn initiation and completion.



Lesson Plan: Parallel Turns and Beyond

Goals

- Link parallel turns with pole touch. Active and dynamic steering of the feet.
- Greater upper and lower body separation. More active countering and carving turns.
- Skiing any run, including black diamonds, in control with more active and controlled turning.
- Ski all snow conditions.
- Introduction to bumps, powder, and running gates.

Teaching Tips

- Emphasize a counter stance with body moving toward center of the new turn.
- The parallel turn begins as a skidded turn. Gradually it becomes a carved turn. Promote active steering of the inside ski.
- Assess terrain and snow conditions when planning the lesson. Look for ways to ensure success, while challenging the skier. Choose a bump run with an easy exit onto groomed. Choose powder next to a groomed run.
- For powder skiing, promote a wider, more even-footed stance and pressure.

Exercises

- Skating with slight hold in glide.
- Uphill Christie Fan progressions — experiment with body positions.
- Refine pole touch (touching toward the center of the turn)
- Hop turns, leapers, 1000 steps, hockey stops
- Skate on slight downhill grade.
- For bumps, traverse a bump run in a “box,” turn on the tops then in the troughs.
- For powder, three turns in groomed and one in powder and slowly increase the number of turns in the powder.
- Ski an open GS course on gentle terrain.

Skills Concept (BERP) Review

- ◆ **Balancing movements** — Quiet controlled movements make balance recovery much easier.
- ◆ **Edge-control movements** — Look for edge angles created with feet knees and hips.
- ◆ **Rotary movements** — Upper lower body separation will aid in low body steering.
- ◆ **Pressure-control movements** — Flexion and extension will aid in appropriate ski to snow pressure.

Notes

