



Standard Operating Guide for Introduction to Alpine Skiing

*Helping people enjoy
the great outdoors,
one turn at a time, at
New York's Winter
Snowpark!*

Alpine Instructors

**Belleayre Mountain
PO Box 313
Highmount, NY 12441**

Phone: 1.800.942.6904

Updated
October 2020

Introduction

This Standard Operating Guide (SOG) has been developed to help you be successful as an Alpine Instructor at Belleayre Mountain. This guide has been developed as if there was station teaching. Sometimes this may happen if necessary and other times you may take your student or group through all phases or stations in this guide. The one thing that is always necessary, is that you as an instructor have flexibility for changing conditions and processes throughout the day as the environment changes.

In a perfect world success would happen every time. However, in reality, there are many variables that can keep a person from being successful. As instructors, we can minimize many of these variables by the way we introduce, demonstrate and teach these skiing concepts.

This is not to say that we should all use the same words, or always use the same exercises, but our underlying messages need to have the same roots. The fundamental skills that we introduce at this time in a persons skiing will be the foundation for future development in the sport.

At Belleayre Mountain we find that a wedge progression is the most effective method for teaching on our terrain. The advantages of using a wedge progression are that it:

- Offer a wider base of support.
- Allows students to keep their skis on the ground at all times.
- Can be done on any length and shape of ski.

The goal of this manual is to provide our instructors with some of the technical principles and Standard Operating Guidelines for conducting a lesson at Belleayre. Belleayre Mountain is a member school of **Professional Ski Instructors of America – Eastern Division (PSIA-E)** and recognizes the methods used in the American Teaching System (ATS). This reference manual contains information from many current and recognized guides in the industry. Please see the resource list at the end of this manual for further information

It is extremely important that you hone additional skills as an instructor, such as demonstrating each activity often and well. **Most students are more visual learners at this point, so the more they SEE, the better they will respond.**

In this guide pay particular attention to the “**Focus Notes**” in each section. Valuable information regarding key aspects in the students development are highlighted in these sections.

As an instructor at Belleayre we expect that you will always use the priorities of:

Safety, Fun and Learning in all of your lessons.

Station 1 – Flat Terrain

Students learn basic stance, walking, climbing and how to get up after falling.

Movement and Skill Goals

- Do the students have all the equipment they need - including poles?
- Understanding equipment: how boots go into bindings.
- Understanding basic ski design: tip, tail, waist, edges.
- How to clean snow off of boots.
- Getting in and out of bindings.
- Developing awareness with the boots, skis and poles.
- Walking in boots and skis around the Teaching Circle.

Alpine Technical Fundamentals

The fundamental mechanics of skiing, outlined below, remain consistent through all level. The performance criteria for these fundamentals will vary based on the application to common beginner, intermediate, and advanced zone outcomes.

- Control the relationship of the Center of Mass to the base of support to direct pressure along the length of the skis.
- Control pressure from ski to ski and direct pressure toward the outside ski.
- Control edge angles through a combination of inclination and angulation.
- Control the skis' rotation with leg rotation, separate from the upper body.
- Regulate the magnitude of pressure created through ski/snow interaction.

Just Boots

- a) Walk in boots (w/ poles) in a circle – change direction.
- b) Side step up the hill in boots – make lines in snow with sides of boots.
- c) Herringbone on the flats and up a slight incline.
- d) Try walking up a hill with the toes of your boots.
- e) Jump in boots.
- f) Simulate flexing, extending (tall and small) and balance awareness.
- g) Make a wedge with your legs and feet. Understand that rotating legs and feet will turn their skis.

One Ski

- a) Have students put on one ski, left or right you pick (everyone the same).
“Scooter” around in large circles on flat terrain. Emphasize gliding on one ski, staying on flat terrain.
- b) Practice turning the ski on and off the snow throughout the circle.
- c) Have students try and pivot ski under their foot while standing still making small and big “bowties” in the snow with your ski.

Focus Note: *Point out to the student that it is much easier to turn a ski that is flat and NOT on edge. Being able to “un-edge” a ski is just as much of a skill as putting a ski on edge. If the student can not get the ski flat – further development beyond this point may be difficult.*

Two Skis

- a) Have students repeat all the exercises that were introduced in boot drills.
- b) Explore stance moving forward and back – up and down.
- c) Develop good side stepping technique – show in boots and transfer to skis.
- d) Emphasize small steps (baby steps) when making moves with your skis which will help reduce the number of times they step on their own skis.

Getting Up - After a Fall

When someone falls, it is appropriate to demonstrate different ways to get up. If no one falls, you should show one way to get up. However, because of a student's physical strength, athleticism and mobility, one method might not work for everyone. Helping a student get up can be dangerous for you (throwing out your back etc.) Use your best judgment. Some students may need to remove one ski in order to get up by themselves.

Take Your Time – Demonstrate - Use Appropriate Terrain!

Station 2 – Slight Grade – (Natural Run-Out If Possible)

Students learn to balance while moving through straight run activities.

Movement and Skill Goals

- Glide down a gentle slope with skis pointing straight down the hill – come to natural stop.
- Explore changing weight from ski to ski.
- Discuss movements that allow us to go with the equipment.

Developing Skills and Performing Drills

The students ability to balance on their skis will continue to be very challenging at this point. We are also working on keeping the skis straight (rotary skills) and allowing the skis to stay flat on the snow (edging movement skills). In addition, allowing the body to flex somewhat evenly will help promote good pressure control movement skills.

- At this stage it is important that YOU show what a proper stance looks like.
 - ✓ Tall stance.
 - ✓ Slightly flexed in the ankles and knees (enough so that the shins are just touching the cuffs of the boot – NOT crushing them).
 - ✓ Balanced over the whole foot.
 - ✓ Hands and arms are in the peripheral vision when looking forward.
 - ✓ Feet and legs are about hip width apart (varies from person to person).
 - ✓ Skis are flat on the snow.

Straight Run

Demonstrate a straight run several times for the group. Make sure that you come to a natural stop like you want your students to. The snow conditions of the day (fast or slow) will dictate how much pitch you will need to have a successful straight run. This is why it is important for YOU to test the area first, before your students go and potentially move too fast down the hill for their comfort. If you do not come to a natural stop, you may have to introduce taking small steps back up the hill as they come to the end of the straight-run.

Focus Note: *It is extremely important to keep the students on fairly flat terrain for their first straight run. In fact, their first straight run could very well be on the flats, pushing themselves with their poles. One of the biggest mistakes we make as instructors is taking our students to the top of the pitch for their first run. This defeats the student and all of their moves become defensive in an effort to survive.*

Straight Run – Drills

- Practice flexing and extending the ankles and the knees.
- Rock forwards and backwards.
- Try having students walk out of the turn with small stepping moves.
- Make large up and down movements – touch your toes – stand up.
- Straight run with a hop in the middle.

Take Your Time – Demonstrate - Use Appropriate Terrain!

Station 3 – Slight Grade – (Natural Run-Out If Possible)

Students learn to do a gliding wedge.

Movement and Skill Goals

- Make a wedge that glides.
- Vary the size of the wedge.
- Understand what happens with different size wedges (balance, speed, edging,).

Developing Skills and Performing Drills

The blending of skills starts to become more evident at this station with the skis being guided into a wedge (rotary movements), adjustments in the size of the wedge (balance), keeping the skis fairly flat (edge control) and continual flexing the ankles, knees and hips to equally distribute pressure along the skis.

On the Flats

- On the flats, show students how to make a wedge by turning their feet into a wedge. This should first be done with just the boots, then put the skis on and try it again. Remind the group of the exercises that were practiced at **Station 1**.
- While in the wedge on the flats, have students propel themselves along by pushing with their poles.

Slight Grade

- Have students climb up the hill a short distance, do a straight run and turn their skis into a wedge as they begin to come to a natural stop.
- Start a wedge from the beginning of the run.
- Rock forward and back while skiing in a wedge.
- Move up and down while skiing in a wedge.
- Vary the size of the wedge using numbers. 1 = straight run, 5 = large wedge and have the students explore the speed changing that comes from various sizes. These are also referred to as “wedge change-up’s”.

Focus Note: *It is important that students are introduced to the gliding wedge on flat terrain, propelling themselves along with their poles. When students first start to move in a wedge, there is a tendency for their tips to cross and/or to return to a parallel relationship. Students need to learn how to use the correct muscles to hold their skis in the wedge position, in a safe, non-threatening situation, before venturing onto even the slightest grade.*

Additionally, make sure that the wedge is not too large. A wedge that is too large will have the skis on edge, making them difficult to control. Making the wedge smaller and standing taller will allow the skis to glide more easily, and will make turning easier when the students get to the next station.

Take Your Time – Demonstrate - Use Appropriate Terrain!

Station 4 – Increased Grade

Students learn to turn left and right to a stop and to link shallow turns on gentle terrain.

Movement and Skill Goals

- Keeping the wedge size relatively constant
- Make turns in both directions to a stop
- Link wedge turns

Developing Skills and Performing Drills

As the student gets involved with more of the rotary skills (turning the legs), other sensations start to build as well. Rotary movements of the leg place the ski slightly on edge which creates deflection of the ski against the snow's surface. This is where the direction change comes from. This deflection also creates pressure management issues as pressure will always increase on a ski that is more on edge than a flat ski. Your student will express the feeling of a "heavy" ski as it is turned across the fall line.

On the Flats

- Once again, show students the turning movement of the leg by picking up your foot and twisting it off the snow. Lay your pole on the ground and have each student place their ski on the grip (which will keep their ski slightly off the snow). Have them twist their ski back and forth over the pole so they can feel the turning action of the leg. A large branch from the woods or section of PVC piping also works well.

Slight Grade

- Have students climb up the hill a short distance
- Have students start down the hill in a wedge and gradually have them turn one leg.
- On the next run emphasize guiding the tips of the skis in the direction you want to go.
- Gradually increase the distance they ski and the amount that they turn.
- Emphasize that BOTH legs turn.

Once students are able to link shallow turns, have them finish their run by turning in a designated direction to a stop.

Focus Note: *At this stage you should pay close attention to the student's wedge size, body position and general movements. A wedge that is too large will have skis working against each other and will not allow effective turning movements of the legs. A wedge that is too large may be a DEFENSIVE reaction because the student is uncomfortable with the terrain they are on. This should be a clue for you to bring your student down to more desirable terrain.*

Take Your Time – Demonstrate - Use Appropriate Terrain!

Station 5 – Increased Consistent Grade – No Run-Out

Students learn how to ride the handle tow and how to refine linked wedge turns

Movement and Skill Goals

- Link turns down the handle tow slope in the Teaching Circle area.
- Speed up and slow down by changing the shape of the turn.
- Develop a narrower wedge that allows more efficient skill blending.

Developing Skills and Performing Drills

The most difficult and possibly frustrating part of this station is riding the handle tow. The person may have just “mastered” staying up on the skis – only to be leveled to the ground by outside forces jerking them up the hill. A few extra minutes explaining how to get on and off the lift is invaluable. See instructions - “Handle Tow for Skiers” at the end of this section for complete guidelines on how to teach this.

With the increased length of trail, students will be able to accumulate some mileage and feel sensations for longer periods of time. It is up to YOU to bring these sensations to the forefront of your students experience. Ask your student; “Do you feel pressure building on your downhill ski?” “Do you like that feeling or would you like to make it less?” “Try making your wedge smaller and your right turn will be easier”. All of these comments can be made as you are skiing with your students giving them feedback as the sensations develop.

Before you go UP !

- ✓ Instruct student in the use of the tow, both loading and unloading.
- ✓ If necessary, pick an unloading point that is midway between the bottom and the top.
- ✓ Instruct students what to do if they fall off.

On the Hill

- Work on each student’s ability to link turns, control speed and create a variety of turn shapes.
- Have student follow you as you change speed and turn shape.
- Work on having students stop quickly by developing short turns to a stop.

Focus Note: *Skiers who have been pushed through the stations before they were ready, will be blatantly obvious. Out of control skiers have No Business being in the handle tow area. If you feel that a student needs more practice on gradual terrain, take him/her back to Station 4.*

Station 5 is also a good place to start talking about the skier responsibility code and the trail marking system regarding difficulty level.

Handle Tow for Skiers

The surface lift in the Teaching Circle is generally used for lessons in the TC only. However, this does not mean that it can not be used by anyone who has a lift ticket on the mountain. In general, we would encourage anyone who is not part of a lesson or who has not gone through the TC stations, to use the handle tow located outside the TC on the Running Bear trail.

- First , explain how the lift operates in an area away from the lift where they are comfortable.
- Allow your students to watch other people getting on the lift. This is a great learning experience, demonstrating the problems and success people have getting on.
- Explain to the student that as the handle is grasped, the jolt is absorbed with the arms and balance is adjusted as you start to be pulled.

These directions are for the Handle Tow in the T.C. where the handle would be on your right side when boarding the lift.

- 1) At loading area point skis up the hill so they are straight (parallel). Watch the distance between you and the handle tow. Too close and it will grab you behind the leg. Too far away and it will be difficult to grab the handle.
 - 2) Hold your poles in your left hand.
 - 3) Look over your right shoulder while keeping your skis uphill.
 - 4) Reach with your right arm behind you palm UP.
 - 5) Let one or two handles go by to get a feeling for the timing.
 - 6) Grasp the handle firmly and let it pull you.
 - 7) As you move up the hill, keep your skis straight and stand relatively tall so you are more comfortable.
 - 8) Unloading should be done at the top where it flattens out – unless instructed otherwise. Release the handle tow gently and take small steps away from the area.
 - 9) Remind your students that if they fall off the lift, that they should move out of the way and to the slope side of the trail as quickly as possible.
- Once again, it is important to walk through all of these steps before they go up the lift (or even get to the front of the line). You can practice this by using your hand or a ski pole (give a little tug to simulate the lift) in an area off to the side.

Some Misunderstood Elements of Ski Teaching

- **Students should lean forward when skiing:** *Leaning too far forward is no better than leaning too far back. A neutral stance, centered over your skis with your shins touching (not crushing) the boot cuff is most appropriate.*
- **You turn by pushing your big toe down (button):** *This should NOT be your method for getting someone to turn. Sometimes it works; sometimes it doesn't and in the long run, creates problems in stance, edge use and control. Direction change involves a blending of skills and primarily comes from turning the legs (femurs) in the hip sockets.*
- **You turn by lifting your toes in one of the boots:** *This should NOT be your method for getting someone to turn. Lifting the toes to the top of the boot (lets say in your right boot) is called dorsiflexion. This is good in that it makes a strong ankle and builds good sensation of ankle flexion. However, turning created from this method is usually the result of weight changes in ski distribution. Using this as a turning method will NOT help develop long term skills that build on good skill blending.*
- **You turn by just looking where you want to go:** *If turning results from only doing this, then you have changed direction by using Upper Body Rotation. Turning should be initiated from the Snow Up – Not the Top Down.*
- **I should always keep my hands directly in front of me:** *A person who skis with their hands locked in front of them will have a difficult time staying in balance. As long as the hands are somewhere in the peripheral vision while looking forward – that's OK. Staying in balance requires us to move, adjusting our arms, hands, fingertips etc. If we don't move – we don't stay in balance.*
- **You should always keep your upper body facing downhill:** *Your upper body should face the direction of the new turn. Sometimes it is more downhill and sometimes it is more across the hill. It all depends on what size turn you are making. Making a long radius turn with your upper body facing directly down the hill isn't very comfortable and looks pretty silly.*
- **You create a wedge by pushing out the tails:** *A wedge is created by turning the whole ski from a centered stance. Pushing out the tails of the skis is created from a stance that is too far forward.*
- **If I Yell louder, you will learn faster:** *Interestingly enough...NO! In fact, most students, especially at this level, will learn most by Doing and Watching. If your voice hurts at the end of the day, its time to reevaluate your approach.*

Resources for this Guide

PSIA/AASI Teaching Snowsports Manual (2018)

PSIA/AASI Alpine Technical Manual (2014) and Alpine Skiing Fundamentals appendix (2018)

PSIA National Alpine Certification Standards (2015)

PSIA/AASI National Children's Specialist Standards (2012)

PSIA/AASI Children's Instruction Manual (2008)

PSIA/AASI Core Concepts for Snowsports Instructors Manual

32 Degrees – The Journal of Professional Snowsports Instruction – PSIA

PSIS/AASI – E-Learning <https://lms.thesnowpros.org/>