

Welcome to Ski and Snowboard Instructing at Disabled Sports Eastern Sierra!



Welcome! And thank you for donating your time to Disabled Sports Eastern Sierra and our students. People with disabilities gain enormous benefits from participating in our program. Sports provide mobility, freedom of movement and optimal health. The increased self-esteem our students gain through our program enables them to pursue a more rewarding lifestyle by promoting their abilities versus their disabilities. Your time allows this to happen!



This guide will provide instructors with teaching information needed to be successful at DSES and at other ski and snowboard schools. DSES is a member school of Professional Ski Instructors of America (PSIA). DSES promotes and follows the teaching philosophies of PSIA and American Association of Snowboard Instructors (AASI). This guide will familiarize you with the American Teaching System (ATS), and gives you an idea of **who** our students are, **what** to teach them and **how** to do it. You will also find some of the most common adaptations for teaching people with disabilities. For detailed descriptions of disabilities, adaptive progressions and equipment progressions, please refer to our extensive library or attend our clinics specific to those topics.

We believe that consistency of product and service determines the success of an organization, and it is important that all of our instructors follow established teaching guidelines. Following these guidelines makes lessons within our organization consistent – students can have any instructor and expect the same quality lesson. Not only does this enhance the quality of lessons at DSES but it allows our students to move seamlessly from our program to any other ski/snowboard school.



We have high standards for all of our staff and volunteers and expect you to always act in a professional manner and to promote

guest service ideals. Always use the priority of Safety, Fun and Learning in all of your lessons.

Thank you again for donating your time and energy to our students and their families and caregivers – it's one of the greatest gifts you can give. We hope that your time here is enjoyable and rewarding. *The Trainers and Staff of Disabled Sports Eastern Sierra*

American Teaching System (ATS)

What is it? ATS is a progression oriented, outcome based and student centered teaching format. Or put another way, an individual's skiing or riding skills build upon one another based upon the student's needs.

Principles and Philosophies

- Student Centered – The lesson topic is based on the student's needs
- Outcome Based – There should be an outcome to every lesson
- Experiential – People learn by doing it not hearing about it.
- Learning Partnership Based – The student and instructor develop the lesson topic together
- Guest Service Driven – Students are guests. They deserve a professional level of service

Components

- **Teaching Model**
 - Instructor Behavior – Adaptive Teaching Model
 - Student Behavior – Background and Motivation, Learning Preferences, Attitude, etc.
- **Skiing/Snowboarding Model**
 - Skiing skills concept – balance, rotary, edging, pressure
 - Snowboarding skills concept – pivoting, pressure, tilting, twist
- **Service Model**
 - Meet and greet everyone
 - Effective communication

Why follow ATS?

ATS gives instructors and ski schools a format for consistency. ATS allows all instructors of all abilities in all disciplines a guideline for progressing or correcting movement patterns. Using ATS as a foundation for creating lesson plans gives us a base for adapting to any variety of students.

Who Are Our Guests?

Our guests include people with any of a wide range of cognitive and physical disabilities and their families or their caregivers. People come to our program for a variety of reasons, and it's imperative that instructors find out guests' needs and goals, abilities and limitations before determining a lesson plan. Generally, our students are not able to learn in the environment of a group lesson or may require specialized equipment. Recognizing and understanding our students' unique needs is a key component of a successful lesson.



Our guests (students, caregivers and parents/family) are here to recreate, explore possibilities and enjoy the Mammoth winter environment! It is the role of the instructor to facilitate this process by finding out the student's goals and then providing lessons that use the priority of Safety, Fun and Learning, (in that order). Instructors are also guides or resources to enhance the vacation experience. Guest Service is a priority. One reason for the success of DSES is that we provide our guests with a friendly and caring experience from start to finish!

DSES student demographics show that roughly 70% of our students have cognitive disabilities and 30% have physical disabilities. Common cognitive disabilities are Autism Spectrum Disorder, Downs Syndrome, Cerebral Palsy, ADHD, Traumatic Brain Injury and Cerebral Vascular Injuries, (stroke). Common physical disabilities include Amputations, Spinal Cord Injuries, Cancer, Muscular Dystrophy, Spina Bifida, Multiple Sclerosis, and Visual Impairments. DSES serves anyone with any kind of disability, however.

Successful adaptive instructors are familiar with the following: 1. Knowledge of the symptoms and Red Flags (areas of safety concern) with a variety of common disabilities. 2. A basic understanding of human development (Cap Model), 3. The ability and discipline to perform Student Assessments, (DSES Assessment Model). 4. A basic understanding of ski and snowboard instruction, (PSIA/AASI Teaching, Skiing and Riding Models). Understanding the information outlined above allows the instructor to provide the best possible experience to our guests!

Information on disabilities can be found in the Winter Volunteer Manual, The DSES website under the Volunteer Disability Resource Center, PSIA Manuals, on the Internet or by asking a Staff Member. Information regarding human development and ski and snowboard instruction can be found below, In PSIA/AASI Manuals, or through the DSES Staff!

THE CAP MODEL

The following is a part of PSIA's CAP Model, a model for human development. The CAP Model highlights human development by typical age groups in three areas: **C**ognitive development, **A**ffective, or emotional development, and **P**hysical development.

The characteristics and ages below reference able bodied/minded children. Many adaptive students will show the same traits and behaviors. In some cases, however, DSES students may display cognitive, emotional or physical characteristics which do not match the chronological ages listed below. One or all of these may be delayed for a number of reasons, (an 18 year old student with a cognitive and emotional age of 7 for example).

By understanding the typical characteristics listed below and the usual ages they appear in students, the adaptive instructor can recognize typical behaviors, emotions and movements. The instructor can then adjust their teaching style, tasks and communication to the appropriate level of the student they are working with. Please familiarize yourself with the following:

Young Children - 3 to 6 years

C

Welcome to my World- Egocentrism

Fantasy- relates to the world through pretending.

Able to create still pictures in mind

Developing patterns of movement and language

Can follow one direction at a time

Cannot reverse thought processes, trouble comprehending the mirror image.

A

Plays beside others rather than with others

Acceptance by adults, parents, teachers important

Good is good, bad is bad, moral development, need to know the rules

P

Large head to body- High Center of Mass

Large muscle group strength and coordination develops first

Develop motor control of the head and torso first

Older Children - 7 to 10 years

C

Sees the world from more than one point of view

Keep it real (Concrete), avoid abstract explanations

Able to image-to picture themselves moving in the mind

The Discovery of Logic-Limited to concrete experiences

Able to deal with more than one direction at a time, but not too many

May be able to mirror image

A

Cooperative play to competition

Able to understand consequences, but tends to act first

Test own competence, how much to trust adults and our trust of them

Clever as a fox morals

P

CM moving down to hip area similar to an adult's

Fine muscle coordination is developing and refined movements can be developed with time and mileage.

New and unfamiliar movements and skills can be learned more easily but may still utilize larger muscle groups.

Tweens - 11 to 13 years

C

Imaginary Audience-believe that everyone is observing/judging them

Personal Fable- believe that only they have had it this tough

The Age of Reason-Abstract thinking

Exploring all the Possibilities

Problem Solving-Discovering the Answers

A

Self-Esteem: Vulnerability and Anxiety/peer acceptance desired

Cliques and Crowds

“All in favor, say I”-peer view important for deciding good/bad

P

Rapid growth and body changes

Strength and coordination may not match bone growth

CM goes on a journey as body length changes

This is only a part of the CAP Model, which continues to old age. By understanding the CAP Model, the adaptive instructor can recognize common cognitive, emotional and physical traits in their students. This allows the instructor to tailor communication so that it is easily understood, anticipate and handle typical emotional behaviors and select skiing or riding tasks which are appropriate for the physical development of the student.

What Do You Teach?

As member of PSIA (the Professional Ski Instructors of America) and AASI, (the American of Association of Snowboard Instructors), DSES follows the principles of the American Teaching System.

The PSIA's Four Fundamental Skills of Alpine Skiing are Balancing Movements, Rotary Movements, Pressure Control Movements and Edging Control Movements.

The AASI Snowboarding Model is broken into Fundamental Movements (how the rider moves) and Performance Concepts, (how the snowboard interacts with the snow). The Fundamental Movements of snowboarding are Balance, Rotation and Flexion Extension. The Performance Concepts are Tilt, (edge angle); Twist (torsional flex); Pivot, (rotation) and Pressure Distribution, (front to back, side to side and weighting and unweighting).



Please review the following paying particular attention to your preferred method of sliding!

The Four Fundamental Skills of Skiing	The Fundamental Movements of Snowboarding
<p>Balancing Movements: This is the most fundamental skill. If a student is not able to balance over the center of the skis all the other skills and the student's ability to progress will be affected. Generally a balanced skier is one where the skier's center of mass is over the center of the ski. For stand up skiers, individuals should be upright with shins lightly touching the front of the boots, hips over the feet, looking ahead and hands in front. For sit down skiers the same principles apply, but positions need to be modified for the individual, so the skier's center of mass is over the center of the ski.</p>	<p>Balancing Movements: Good Balance involves a tall and relaxed stance and balance over both feet and over the whole foot. Head and hips centered between the feet with upper body, (shoulders/arms) aligned with the lower body. As in alpine skiing, a balanced stance is very important to correctly perform other movements.</p>
<p>Rotary Movements: For beginning skiers this is the skill of next highest priority after balance. The most efficient way to turn the skis is by rotating the whole leg within the pelvis. This is the movement that should be taught to all stand-up skiers, if it is possible for them. For many of our students that lack the muscle control, balance or strength to rotate their legs (or for sit down, 3-track and 4-track skiers) alternative rotary movements can be used.</p>	<p>Rotational Movements: Beginner snowboarders learn to steer the board by attaining a flat board and pivoting the board in the direction they wish to travel. It is generally desirable to use the lower body to generate rotary movements. As in skiing, the goal is to use the feet and legs to steer the board but some of our students may need to steer with their shoulders to guide the board. As students progress and become more comfortable on their board, foot steering becomes a priority.</p>
<p>Pressure Control Movements: These movements manage the pressure exerted along the skis. The three main types of pressure control movements are: flexion/extension (up and down), fore/aft leverage (front to back) and lateral weight shifting (foot to foot). These movements enhance balance and rotary movements by giving the student more control over the shape of the turn.</p>	<p>Flexion/Extension Movements: These movements are used to adjust angles of the body to regulate the pressure the snowboard exerts on the snow. They result in forward or rearward pressure changes, weight shifts from one edge of the board to the other or changes in weighting through relative vertical movements of the body. Snowboarding uses flexion/extension movements throughout the turn to help initiate turns and absorb terrain features as well as fore/aft movements to</p>

	enhance speed control and give shape to turns.
Edge Control Movements: These movements regulate the edge angle of the skis. Beginner skiers use the wedge to create edge angle. As skiers develop, edge control should be managed with lateral movements of the lower legs.	Performance Concepts of Snowboarding
	Twist or Torsional Flex: This describes the twisting of the board along its long axis. When initiating turns, twisting the board allows for a smoother turn and earlier initiation point during the turn. It also allows the snowboarder to maintain an edge while traversing flat areas without fear of catching an edge.
	Tilting or Edge Angle: This describes the board's edge angle to the snow. Toe-side edging and heel-side edging regulate speed and give control to the snowboarder. Managing the amount of edge using smooth consistent movements is imperative for the success of the beginner snowboarder.
	Pivoting or Rotation: This describes the direction that the board is pointing relative to the direction of travel and the changes to direction around a specific pivot point.
	Pressure Distribution: This describes the pressure exerted along the snowboard. The three main types of pressure control are: a weighting or unweighting using flexion/extension (up and down) movements, fore/aft pressure (tip to tail) and lateral pressure (side to side). Snowboarding uses changes in pressure distribution throughout the turn to help initiate turns and absorb terrain features as well as fore/aft movements to enhance speed. These changes in pressure should ultimately be smooth and progressive.

As an instructor, it is important to understand the four fundamental skills of skiing and/or the movements and performance concepts of snowboarding. These concepts provide you with a solid framework for understanding the sports of skiing and snowboarding. By understanding and applying these concepts in your own sliding, you will improve your own performance. You will also have a better ability to analyze and improve your student's movements and help them achieve fun and freedom on the slopes.

Turning Phases



You will learn proper timing of movements and skills within turns by referencing Turning Phases or the different parts of the turn. Turning phases tell you **when** to make certain movements

Initiation Phase: This phase happens as the skier or snowboarder is changing direction from one turn to the next turn. For skiers, it coincides with one or both skis changing edges. For snowboarders it may correspond with the edge change or the preparation (flattening of the board) for the

edge change.

Shaping Phase: This phase happens as the skis or snowboard approach, then enter and finally move across the fall line (or the imaginary line pointing down the hill).

Finishing Phase: This phase happens as the board or skis come across the hill. They are guided across, and perhaps up the hill appropriately for the amount of speed control required by the skier or boarder.

The Adaptive Teaching Model

This Model highlights the “formula” for providing a good lesson.

1. Introduce Yourself

Establish and continually build rapport with the student. Create a fun, open and supportive environment. Let them know you are both here to have fun! Take your glasses/goggles off, get down to the student's level. Clearly define the general schedule of the lesson, when and where to meet after the lesson.

2. Assess the Student

Conduct a thorough evaluation of the student's disability so you can adapt, modify and prepare the physical aspects of the lesson to meet the student's needs. This is called the “Student Assessment.” Review the disability or disabilities on the DSES website to understand how the disability might affect on hill performance. Inquire about previous experience with skiing and other sports. Take the student's learning preferences into consideration. Remember, the student or the student's family is the best resource for his

or her disability. A thorough explanation of the Student Assessment is detailed in the next section.

3. Determine Goals and Plan Objectives

Jointly set goals based on the skier's potential and desires. Plan a learning objective relative to the student's goals. Formulate a short, logical progression after watching the student ski or snowboard on a warm up run. Determine for that lesson what the most suitable terrain and snow conditions are.

4. Present and Share Information

Vary styles of presenting information to be suitable to the situation. After the warm up run quickly present the topic you have selected. To be the most effective teacher use your understanding of the typical learning styles, (Doer, Watcher, Feeler, Thinker) and your understanding of the disability to determine the best way to present the information. Select one or a combination of the following styles: Through repetition, trial and error for the Doer; visually for the Watcher through the use of Demonstrations, (remember to demonstrate sliding towards the student as well as away from them), Auditory for the Thinker through an explanation of what to do, or kinesthetically for the Feeler by describing feelings or sensations you would expect the student to feel. For most of our cognitively disabled students they will need to simply do the movements over and over until they get them.

5. Guided Practice

Make sure that students get lots of mileage to practice new skills. Set practice tasks that are appropriately challenging. Take this opportunity to enjoy the successes and sliding! Provide specific feedback to the student. Reinforce student progress. Have Fun! This step should comprise the bulk of your lesson.

6. Check for Understanding

Verify the student's level of physical understanding based on skiing performances that are consistent with the lesson objectives.

7. Summarize the Learning Segment

Review the learning segment goals and objectives and describe the degree of accomplishments to the student and parents/caregiver. Be positive! Even small accomplishments are huge successes for some students! Summarize with the student if appropriate. Preview the next learning segment and encourage further development. Establish independent practice guidelines for each student. Review the lesson with the parents or caregiver, highlighting successes, Invite the student back!



Student Assessments

A Student Assessment should be performed by the Primary Instructor on every lesson he/she teaches. This starts as the student comes through the door and continues throughout the entire lesson. Reading the student profile gives a basic understanding of the challenges facing the student, however, asking questions of the student and/or caregiver will give you more information.

Watch your student, have him/her do specific movements for you, determine goals, and develop a plan. Determine the **Red Flags** for your student. Red Flags are areas of concern with your particular student which may result in a situation where safety is an issue during your lesson.

DSES has developed a plan consistent with the Cap Model for performing your Student Assessment. This is:

1. Understand the **overall** nature or characteristics of the disability you are dealing with including how it occurs, how it manifests and the RED FLAGS.
2. Discover how the disability affects your particular student's **cognition** or understanding.
3. Discover how the disability affects your student's **emotions**, (what's funny, frustrating, scary, etc.).
4. Discover how the disability affects your student's **movements** or ability to move.
5. Discover the **Red Flags** for this **particular** student.
6. Discover the student's **goals**.

It is the Primary Instructor's responsibility to be sure that a Student Assessment is performed for EVERY lesson they teach at DSES, even if they have worked with that student before. There can always be some changes to behavior, movements, medications, etc.

Basic Progressions

Within the framework of the Teaching Model, we teach and explore different movements to improve our student's skiing or riding skills. Typically, we do this through the use of progressions.

A progression is a series of steps starting with the easiest movements needed and moves, (or progresses) toward more complex or combined movements. It is the model from which we *adapt* to our students and their unique needs.

It is important to understand that the term "progression" can mean different things. For example, progressions can have different time frames, (a one hour lesson or a season long plan). Progressions can be very specific, (how to stop) or more extended, (how to move from a wedge turn to a parallel turn). For our purposes we will explore progressions in the Beginning, Novice and Intermediate Zones here. It is better to keep progressions short, as in 3 steps as opposed to 4, 5 or more steps, especially with adaptive students. The use of a progression will typically occur during step 4 of the Teaching Model.

It is important to remember the priority of Safety, Fun and Learning! When a student acquires a new skill (whether through a progression or not), it is vital that they be provided with mileage in order to solidify and master that skill. This is the perfect time to have FUN skiing or riding!

Some students will have specialized equipment, some will need to repeat steps in a progression and some will not be capable of all the steps and will need to bypass them. You will need to be creative to make progressions your own and find alternatives to make them work for different people. The following progressions are the “what” you teach – remember to always follow the teaching model.

First Time Progression	
Skiers	Snowboarders
<p>Flat Land</p> <p>Introduce the Equipment – make sure that your student understands how to buckle boots, get in and out of bindings and carry skis. Use games and analogies for kids (like putting your foot in the alligator’s mouth). DSES recommends shorter rather than longer skis, (chest height).</p> <p>Boots Only</p> <p>– have your student move around in boots. Go through all of the movements they may need with their skis on. Wedge, sidestepping, flexing, jumping, stepping from foot to foot, etc.</p> <p>One Ski On – continue exploring the same movements with one ski on and one off – this allows students to get a feel for sliding while they still have the “emergency break” of their other foot. You can: spin in a circle using small steps, touch the tip and then the tail to the snow, sidestep, glide like on a skateboard, etc. Make sure that you do this with the other ski as well.</p> <p>Two Skis on Flats – Make sure you do this on a <i>flat</i> area. You may be surprised at how many areas that you thought were flat, in fact</p>	<p>Flat Land</p> <p>Introduce the Equipment – make sure boots fit snug and are tied properly. Go with rental shop expertise for sizing of board (around chin height). Regular or goofy set-up should be assessed as you walk your student to the rentals and take into consideration special circumstances (AFO’s, weak limbs, etc.). Typically the weaker leg will be the rear leg. Make sure the student can manipulate the buckles and help as needed.</p> <p>One-footed – strap on the front foot and pick the board up to feel its weight and length. Practice moving around on flat ground. Push from in front of the board, push from behind. Push and glide placing back foot on stomp pad or against rear binding. Have the student do the drills with a flat board and with an edged board. Never have student travel in direction of rear foot with only one-foot strapped in. Demonstrate all the skills you ask your student to perform.</p> <p>Slight Hill</p> <p>Straight Run - find a slight hill with a flat run-out or counter slope. Then have student place back foot on board, stand tall and glide down</p>

are not. Stay with the same movements here: step in a circle using small steps, step form ski to ski, roll knees in/out to engage edge, practice wedge, hop, hop into wedge, etc.

Slight Hill

The best terrain offers a flat area transitioning to a slight (down) hill and then to a counter (up) slope. **Safety First! Never choose a slope where a student who cannot stop could run into another person or an object.** To get students positioned facing downhill when no flat starting point is available; show them how to step into a wedge.

Two skis climbing a small hill – Explain the “fall line”. Show side stepping by rolling knees and ankles into the hill. If your student is capable of learning to side step show them how to do it – it provides knowledge of the fall line that is indispensable when moving to lift accessed terrain.

Straight Runs – Balanced stance is key here – do as many as needed to achieve a balanced, upright stance with hips over the feet as much as possible.. Students will struggle to wedge properly if they are not in a comfortable, balanced stance. Remind students to stand tall and keep shins touching front of boots.

Gliding Wedge – Show your students how to steer their skis into a wedge shape. Show them how to spread their feet apart and turn their toes inward. Suggest that they “spread” their feet into a wedge or “open” into a wedge. A gliding wedge gives students a wide base of support and “pre-edges” their skis so they can learn to turn without changing edges. Using the word “push” is generally confusing, especially for a student that may take everything you say literally. You don’t want your student bending down and pushing on his foot with his hand.

the slope. The flat run-out should stop the student. Make sure the student is relaxed and has their hips centered in between their feet. Ideally, the student’s upper body should be in alignment with the lower body with the head looking in the direction of travel. You can assist or walk with the student to provide comfort as well as a stopping mechanism if necessary. Emphasize that the student should not step off a moving board!

Up-hill walk or skate – demonstrate the two ways to proceed uphill, skating or walking using board as a platform to push against. This helps teach what the edges are all about.

Straight Run to J-turn using lower body rotation – Have the student do a straight run while placing the rear feet half way off of the board, toe and heel hanging off. When the student has traveled 10 -15 feet down the hill have the student use lower body rotation by pushing the front foot toes down (toe side turn) or pulling up on the front foot toes (heel side turn) to initiate the turn.

OR

Straight Run to J –Turn using upper body rotation - Alternatively, have the student do a straight run while placing back foot half way on the board (toe or heel hanging off). When the student has travelled 10-15 feet down the hill, look, point and turn in the direction they want to travel. By pointing in the direction of the turn the student is using upper body rotation. This is effective if coordination, balance or lower body movements are weaker.

Chairlift Procedures – once the you and student feels relatively comfortable with the straight run and a straight run with turns to a stop (both sides) he/she may be ready to ride the lifts. The bottom line is can they stop themselves, (or can you stop them)? **The only students who should go up the lift are**

Braking Wedge – Once your student can make a wedge in balance without crossing the tips or any other problems, show your student how to open the wedge larger to control speed and stop. If your student is capable of learning to stop on his own this is the essential movement required before taking a student up the chair lift. If your student is not capable of independent speed control, you must use a retention device before taking that person onto a chair lift.

Chairlift Procedures – Remember that your student must be able to stop either independently or with a retention device before riding the chairlift. **The only students who should go up the lift are those who can stop with confidence in a wedge, by turning to both sides or if you have the ability and equipment to assist them to stop.** Give your student the opportunity to watch others load and explain that once at the front of the lift line you will follow a chair to the loading area, (the plastic board in the snow). As the chair approaches, look at the chair, reach back and sit down. Explain the rules of riding the chair lift: **Sit Back, Sit Still, Hold On and Look Ahead.** On Discovery Chair, (Ch. 11), all students shorter than the top of the “Wait Here” sign should use the newly modified training bar unless it interferes with the adaptive equipment required by the student. Unloading should be explained once on the chairlift. Tell your student you will count down to unload and when your skis touch the ground you should “stand up and lean forward”. Make sure you clear the unloading ramp, then stop to get organized for the run.

Wedge Turns – This is the best method to teach students speed control. Once your student can wedge to a stop, show him how to “point” his skis in the direction he wants to go. Using cones or flags to turn around are helpful. Use words like “twist your legs” or

those who can stop with confidence turning to both sides or if you have the ability and equipment to assist them to stop.

Give your student the opportunity to watch others load and explain that once at the front of the lift line you will follow a chair to the loading area, (the plastic board in the snow). As the chair approaches, look at the chair, reach back and sit down. . Explain the rules of riding the chair lift: **Sit Back, Sit Still, Hold On and Look Ahead.** Explain the exit procedures as a straight run off the lift. Unloading procedures should be explained once on the chairlift. You should determine a count for the exit and talk the student off the lift. Place board on ramp, put back foot on board, stand-up and glide off the ramp. Make sure you clear the unloading ramp, then stop to get organized for the run. Once off the chairlift all subsequent exercises are performed with both feet strapped in.

The following exercises need to be practiced on both heel and toe sides.

Side-slip – ideally, a side slip is a key way to develop edging skills and is usually taught in the beginning of the lesson. But it requires a fairly steep slope which is not present on the Discovery Chairlift. However, it is not necessary to complete this step before moving into a falling-leaf. When you can introduce the side slip, be sure to emphasize smooth, subtle edging movements and a flexed and centered stance.

Falling leaf – is an exercise that alternates pointing the nose or tail of the board slightly down the hill while in a sideslip similar to a leaf falling from a tree. This exercise develops all three movements and the four performance concepts. By adjusting pressure from the forward foot to centered on the board, the

“turn your feet”. Unless your student has a physical limitation that prevents it, you should always introduce students to direction changes by turning their legs – NOT by pressuring the outside ski, (this can be added later as an enhancement).

student can adjust his/her speed. Additionally, by increasing and decreasing the edge angle, speed control by friction is learned. When slowing down and looking (rotating) in the desired direction the student is using pivoting to steer the board down or across the hill. Alternatively, by slightly twisting the board (by pushing front toes down or pulling them up), the student can also steer the board thus improving his/her control. Depending on what particular skill needs work the instructor can adapt the focus of the falling leaf to improve individual skills.

Alternative First Time Ski Progression

There will be students who will not have the attention span or physical strength/stamina for completing the First Time Ski progression above. Since many of these students will learn best through an experiential process, we can use a progression which gets them into a wedge position and gets them moving down the hill so they can repeat a stopping movement and gain speed control as quickly as possible. Give lots of positive feedback and encouragement for even the smallest of successes!

Introduce the ski equipment and get the student moving around in just the ski boots. Focus on trying to teach the student to hop and land with their feet apart as if doing jumping jacks.

Put one ski on and get the student used to sliding on the flats. You can try to get them to push out the back of the ski, as if in half a wedge, however it is not really necessary to be successful at this point.

Put the student in two skis on a flat snow surface. Put an appropriate type of tip connector on the student's ski tips. First demonstrate pushing your hands apart using the command “1, 2, 3 Feet Apart” or “1, 2, 3 Red Light” Do the same with the student's hands. Then demonstrate the same command pushing your feet apart into a wedge position. Repeat having the student try with their feet. Repeat this number of times until the student starts to understand that when you give them the command they should try to push their feet apart. The tip connector will help the student produce a wedge position. Make sure that the student does not slide backwards when in a wedge position!

Go to a gentle slope or up the magic carpet. Have the student walk or have skis on as is appropriate. Once in an appropriate place to start the downhill run, attach an appropriate type of tip connector. Safety first! As this student does not have speed control yet make sure there

is no possibility of a runaway student and a collision with another skier, skis on the snow or any fencing. Bring student down the slope to an appropriate starting point if needed. Use a tether or other device to help control the student's speed if necessary. Assist the student down the slope while continuing with the "1, 2, 3 Feet Apart" or "1,2,3 Red Light," (Stop) commands. Repeat this enough so that you are confident that when you give the student the command that they will attempt to push their feet apart and create a wedge.

If possible try to teach the student to come to a complete stop on their own with the above command. It is best if they can stop themselves on a slope as opposed to gliding to the flat and stopping.

If you have an appropriate speed control assist, (tethers work very well), you can now take the student to the Discovery Chairlift and go to Sesame Street West. Continue to use the same commands as before. The Primary Instructor will use the tethers to control the student's speed and direction. If there is an assistant instructor have them demonstrate in front of the student for a visual image. Repeat the command of "1, 2, 3 Feet Apart" or "1, 2 3 Red Light." Repeat this until the student starts to slow down.

If the student is successful at stopping on command, you can start to introduce skiing in a "Yellow Light" or medium sized wedge position. This will allow the student to continue to move slowly down the slope without stopping all of the time.

Only if safe should the Primary Instructor start to wean the student off of the tethers. Start this on a very flat section of the run. Continue with the same commands.

Start to teach the student to turn using the progression above or a "Follow Me" approach, (below).

Novice Progression

Novice skiers are learning how to use turn shape, as opposed to wedge size, to control speed. Novice snowboarders are learning to turn in both directions and to link turns with confidence. All novice students should continue to ski/ride on beginning terrain until they have mastered the skills to allow them to safely and confidently negotiate easier intermediate terrain. Avoid taking students to intermediate terrain too soon. Creatively use beginning terrain to keep your students engaged and challenged.

Linking Wedge Turns – The main skill focus is on rotary movements. Show your students how to continuously steer their feet through the turn and into the next turn. Demonstrating is essential here. The "follow me" approach works well for most students. If your student is

Garlands – similar to the falling leaf, this exercise can be adapted to work on any of the skills. The goal of the garland is to direct the board all the way into the fall line and then back across the hill again, thus simulating the beginning or end of a turn. Start on one edge,

on tethers, try to have one instructor in front to demonstrate movements and turn shape at the student's skill level. Other approaches include: drawing a line in the snow, turning around cones or flags or using a corridor of groomer tracks.

Varying Turn Shape and Size – Continuing with a rotary focus, show your student how to make large and small turns. Use obstacles to turn around or make a game/analogy where you are the leader and vary the size/shape of the turns.

Improving Wedge Turns with Pressure Control – Once your student can link turns in balance with leg steering, introduce shifting their weight from foot to foot. Show them how to move their center of mass over their outside foot through the end of the turn. You may also show them how to extend as they start the turn by extending both legs. As they finish the turn, show them how to flex their ankles smoothly through the rest of the turn. Tasks that help with this are: tapping the inside foot, hand on the outside knee, hopping at the beginning of the turn, using two different colors of flagging, etc. Make sure to give students lots of mileage!!

Wedge Christy – This turn combines the wedge at the initiation and shaping phase with a parallel position and skid during the finishing phase. For many students you will be successful with a “spontaneous wedge christie”. On comfortable terrain, have your student ski in a slightly smaller wedge, at a slightly higher speed. Look for small rolls on which to complete the turns. These cues may promote a spontaneous release of the inside ski, and you may find that your student discovers how to make the skis go parallel without much coaching. With other students, you may want to use a more linear or step by step approach. From a small stationary

steer the board across and then into the fall line. This will build speed. When the board is directly in the fall line have student return to starting edge. This allows the student to recognize when the board is flat and can be pivoted to the new edge. After several repetitions from each edge, proceed to patience turns.

Patience Turn – as implied, this turn develops slowly as the students' comfort with speed will be low. Start by completing a garland and when the board is flat in the fall line have student change edges. As the instructor you should be able to recognize and coach the student when it is appropriate to change edges. Most likely the student will initiate the turn too early and catch the downhill edge. By focusing on the actions of the front foot only, twisting of the board comes naturally and will help reduce the probability of catching the downhill edge. Make one turn at a time, slowing down or stopping prior to initiating a new turn.

Key instruction points:

Focus on front foot only. Pull-up on toes or press down on toes.

Look and point in the direction of travel.

Focus on making smooth edge angle adjustments, jerky motions will result in a slam.

The back foot should follow along naturally; however, moving pressure back to an even distribution between the front and rear feet when finishing the turn is helpful.

Continually assess student's stance; slight bend in knees, athletic stance, head up.

Holding hands may be helpful to the student. Only do this if you have the skills. Safety First!

<p>wedge, show them how to pivot the inside (uphill) ski to match the outside (downhill) ski. Where it is safe, practice this movement in a traverse – both directions. Then use the above movement at the end of one turn to a stop – both directions. Try this for several turns and have your student turn to a stop in a parallel position by turning both skis uphill.</p> <p>Mileage – Once the student can make a Basic Wedge Christie, stay on beginning level terrain and get lots of mileage and practice. Explore new areas of The Discovery Chair and have fun!</p>	<p>Keep instructions simple. Have a single focus at a time. Once that focus is achieved, move onto the next single focus.</p> <p>Linked Turns – once single turns are achieved to both edges, link turns by maintaining movement across the hill and preparing for the next turn before coming to a stop. Work on fore-aft pressure as well as standing tall through the turn and flexing at the end of the turn. Look in the direction of travel and make smooth edge adjustments.</p>
---	---

Intermediate Level Progressions

Intermediate skiers and snowboarders can confidently negotiate easy intermediate terrain while moving down the hill at a moderate speed. Inching your way down an intermediate run does not make someone an intermediate skier or rider. To improve an intermediate skier or rider’s skills, they should learn new skills on terrain that is easy for them (this may be easier intermediate terrain OR beginning terrain) before moving to more difficult terrain.

<p>Advanced Wedge Christy – Once students can match their skis at the end of the turn, show them how to match their skis earlier in the turn. Both rotary and pressure control movements are important here. Show students how to smoothly shift their weight to the outside foot during the shaping phase, gradually making this move earlier in the turn. You can also show them how to turn their skis together with particular focus on steering the inside leg and ski. The inside ski/foot should be pivoted around the center of the foot as opposed to sliding the tail of the ski/heel of the foot towards the outside ski.</p> <p>Basic Parallel – Showing people how to make a parallel turn requires lots of mileage. The focus is on the initiation phase of the turn.</p>	<p>Dynamic Linked Turns – once the student can make linked turns, work on student becoming dynamic. This means adjusting to the terrain, controlling speed and absorbing bumps. As the student becomes more comfortable with his/her speed control, turns can be initiated just prior to the board entering the fall line. This can be achieved by active flexion and extension movements plus a twisting of the board. Steering the board with the front leg will give shape and speed control to the turn.</p> <p>Park – many of our students want to experience the park and on chair 11 there is ample opportunity to play. Using the pipe generally helps with turn initiation. Charging the rollers towards the bottom of the park can work on retracting the legs to absorb bumps,</p>
---	---

Show your students how to turn both feet at the start of the turn. This is similar to the wedge christie progression with the focus on the inside foot. Show them how to extend both legs and pressure the outside leg as they initiate the turn. Tasks that help with this movement include: long drawn out “patience” turns on comfortable terrain or using a slight hop at the start of the turn.

another form of pressure adjustment. And, jumping will work on balance, steering, and pressure control. Have student line-up the jump by pointing the board straight down the hill. As the student hits the lip of the jump, retract the legs and stay relaxed in the air. Look at the landing area and set the board down, slightly nose first, and keep knees soft to absorb the landing. Once the board is down and balance is achieved, use a speed control movement to slow down. There is much trial and error when in the park, however, it is a great way to enhance skills and have fun!

Again, these progressions are just a skeleton of what you can teach. Of course, many of our students will be unable to complete certain steps or will have equipment that requires a modification of these progressions. However, this is the model from which *adaptive* skiing *adapts* and is the foundation for your lessons.

How to Do It Well



All lessons should follow the priority of: Safety, Fun, Learning, (in that order). Setting a safe, fun environment optimizes learning.

SAFETY: Above all, you must follow DSES safety guidelines and protocols and make your student feel comfortable. Students that are scared or uncomfortable cannot learn new skills, and they certainly won't have a good time.

FUN: We're in the guest service business. Our goal is to provide our guests with

superior service and invite them back. Show them a good time! Make them want more. Also, when people are relaxed and having a good time, they are better able to learn new skills.

LEARNING: When you have established a safe, comfortable, relaxing and fun experience, you have set the stage for an optimal learning environment.

Your Responsibility Code

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

Riding Chair Lifts

Before you bring a student to the chair lift make sure that he or she can stop on their own OR that you have the equipment and ability to control their speed for them – always err on the side of caution!

Make sure your student understands how to load, ride and unload before you enter the lift line. Remember to teach them the rules of riding the chair lift: **Sit Back, Sit Still, Hold On, Look Ahead**. Be sure to follow all safety protocols associated with adaptive equipment. Use the chair lift bar with caution – its use has pros and cons. Call it the “bar” or nothing at all – never call it the “safety bar”.

Tools of the Trade

Trail Map, Writing tool (a Sharpie is great) and paper, scraper, wax, toys, finger puppets. Err on the side of caution with equipment. Always bring an edgie-wedgie just to be sure. Having tethers with you is also a good idea, if you’re not sure that your student can stop.

Terrain Selection

Follow “Safety, Fun, Learning”. Teach your students on terrain where they are comfortable and can learn new skills. Move students to new terrain only when they have mastered the terrain they are on. Always err on the side of caution and remember time management. At the end of the lesson, students are tired and may have more difficulty coping with the demands of using new skills on more challenging terrain. Try to introduce more difficult terrain towards the middle of the lesson. Finish the lesson back on easier and familiar terrain to end on a high note.

Measures of Success

Keeping track of trails that you skied and “graduating” to new and more difficult terrain is only one measure of success and usually not the best. Better measures may be: new skills – learning to stop in a wedge or linking turns; Increased independence – stopping without the

edgie-wedgie; controlling speed without tethers. For many of our students, putting on equipment and going outside is a great measure of success. Find out what your students want to accomplish – **it may be totally different from your goals!**

If your students are having trouble with any of the steps in the progression, reevaluate the original goals. You may want to spend more time on a specific skill, present the information in a different way or consider alternative adaptive equipment.

Pacing

Pace your lesson appropriately. Spend time developing foundation skills (Rotary and Balance). Make sure your student has lots of mileage and practice time. Some students take longer than others. Never rush a student through steps or to more difficult terrain. Spending time helping a student master a skill gives that person a sense of accomplishment AND makes it easier to teach him/her new skills.

Remember that many of our students are not used to weather or altitude and can tire easily. Look for signs of fatigue: deterioration of skills, change in behavior, lethargy, decreased attention, yawning. Take a break! Ideally, you should rest before your student gets tired. Students are more likely to get injured or have a meltdown if signs of fatigue are ignored.

Good Luck!

Good luck and have fun during your time as an instructor for DSES. We really appreciate your commitment to the program. We have an “open door” policy and encourage you to ask questions or come to us if you encounter a problem with your lesson. We all have the same goal – to help students enjoy skiing and snowboarding as much as we do!

Resources

Alpine Technical Manual – Skiing and Teaching Skills. 2002. Professional Ski Instructors of America Education Foundation. Lakewood, CO.

Core Concepts for Snowsports Instructors. 2001. Professional Ski Instructors of America Education Foundation. Lakewood, CO.

Adaptive Snowsports Instruction. 2003. Professional Ski Instructors of America Education Foundation. Lakewood, CO.

Childrens Instruction Manual. 1997. Professional Ski Instructors of America Education Foundation. Lakewood, CO.

Alpine Technical Manual. 1996. Professional Ski Instructors of America Education Foundation. Lakewood, CO.