Mission Statement:
To enhance the quality of life of individuals with disabilities by providing year round outdoor adaptive recreational opportunities.

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# Winter Alpine Program Volunteer Training Manual

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Overview

Thank you for choosing to volunteer with Dream Adaptive Recreation. Dream was formed in 1985 with a mission to enhance the quality of life of individuals with disabilities by providing year round outdoor adaptive recreational opportunities. This Manual is designed in conjunction with the Volunteer Handbook. It presents a great deal of information, with the purpose of familiarizing you with our Winter Alpine Program and ensuring that your volunteer experience is safe, enjoyable, and enriching.

Volunteers are critical to the mission of DREAM Adaptive Recreation. They help create an environment where a person’s disability doesn’t define them, but is just one aspect of their life. By minimizing barriers to participation, leveraging abilities, and providing a safe and fun environment, a volunteer helps each participant build confidence. This confidence, we hope, will carry-on into other aspects of the participant’s life.

The highest standards of personal and professional ethics and behavior are expected of all DREAM Adaptive Recreation Volunteers. Further, DREAM expects each Volunteer to display good judgment, diplomacy and courtesy in their professional relationships with members of the Board of Directors and Committees, staff, participants, family members, peer volunteers, sponsors, donors, Whitefish Mountain Resort staff, and the general public.

As a DREAM Winter Alpine Program Volunteer it is your continuing responsibility to read, know and adhere to all policies and procedures outlined in the Training Manual. If there is a change to the manual and/or any Policies and Procedures, you will be notified and will be required to revisit this document on the DREAM Website or to request a hard copy.

Winter Alpine Volunteer Position Descriptions

Lead Volunteer Instructor: A lead volunteer possesses extensive knowledge and experience working with individuals with disabilities in adaptive skiing or snowboarding. They must complete all mandatory paperwork, attend and successfully complete all mandatory training sessions. They have a proven record of adhering to safety protocols. They possess leadership qualities and a passion to help new and less experienced volunteers expand their skills. Lead volunteers often step up to instruct challenging lessons. They make every attempt to attend additional training to expand their adaptive skiing and riding skills.

First-Year Volunteer Instructor: A first-year volunteer instructor is an individual who is volunteering with the DREAM Winter Alpine Program for the first time. They must complete all mandatory paperwork, attend and successfully complete all mandatory training sessions. Each training session will have a minimum passing requirement outlined annually in the training clinic description document. First-year volunteers are welcome and encouraged to shadow lessons until they feel confident and comfortable instructing on their own. There is no minimum volunteer time commitment, however we greatly appreciate those who are willing to consistently give of their time on the same day throughout the winter.

Returning Volunteer Instructor: A returning volunteer instructor is an individual who has volunteered with the DREAM Winter Alpine Program previously. They must complete all mandatory paperwork, attend and successfully complete all mandatory training sessions. Each training session will have a minimum passing requirement outlined annually in the training clinic description document. There is no minimum volunteer time commitment, however we greatly appreciate those who are willing to consistently give of their time on the same day throughout the winter.

Junior Volunteer Instructor: A volunteer who is 16 - 17 years of age. Junior Volunteers may support adaptive skiing and snowboarding lessons by being an assistant. A volunteer must be 18 years old to independently lead adaptive skiing and snowboarding lessons.
Skiing / Riding Policy

Safety is our number one priority! Safety first, fun second! Our goal is to make the volunteer experience as enjoyable as possible. You need to be comfortable and confident that you have the skills to be skiing with the participants you work with. Don't feel obligated or pressured to go beyond this comfort zone as it may put both you and the participant at risk.

The Montana legislature recognizes that there are risks inherent in the sport of skiing regardless of any and all reasonable safety measures which can be employed. The Montana Skier Responsibility Act of 1989 contains provisions that are important to all skiers.

Montana Skier Responsibility Act of 1989 provides in general that:
1. A skier is responsible for knowing and skiing within the range of his/her ability and for abiding by the requirements of the Skier Responsibility Code.
2. A skier shall maintain control of speed and course so as to prevent injury to himself or others and shall obey all posted or other warnings and instructions of the ski area operator.
3. No skier involved in an accident with another skier may depart from the scene of the accident without leaving personal ID; notifying the proper authorities; obtaining assistance when a person involved in the accident is in need of medical help or other assistance.
4. A skier accepts all legal responsibility for injury or damage of any kind to the extent that the injury or damage results from risks inherent in the sport of skiing.

Skier's/Rider's Responsibility Code:

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

Ski Area Boundaries

The Ski Area Boundary is defined by the use of signs and/or string line. For your own safety, ski within the designated area. The Whitefish Mountain Resort is not responsible for any avalanche control or rescues beyond the boundary. Areas outside the designated boundary are not patrolled. If you choose to go beyond these boundaries, you expose yourself to uncontrolled avalanche dangers and wild, unfamiliar terrain. Any rescues beyond the ski area will be done through the Flathead County Sheriff's Department (Phone: 406-755-5300). Certain slopes or areas within the ski area boundaries may from time to time be closed. Please respect these closures for your own safety. Failure to do so may result in the loss of pass or lift ticket.

Participant Guidelines

1. Before working with any participant, review his or her Participant Information Folder. If you have questions, please inquire with the resources around you; Dream staff, School/Special Olympic Program Coordinators, and family members/guardians. If you notice anything that concerns you, please notify DREAM staff immediately. Please be respectful of the information in a participant’s folder and do not discuss any sensitive information with other participants or volunteers.
A Day in the Life

• Instructors should arrive about 30 minutes prior to the start of lessons, and should plan on staying 30 minutes after lessons to put away equipment and complete paperwork.
• When you arrive, check-in with the Program Staff
• Get yourself and your gear ready for the day.
• Review your participant matching for the day, as this may change from week to week. Review your participant’s Progress Report from previous lessons, and begin to make a plan for the day.
• Pull and prep any gear for your participant, and get his/her lift ticket, if needed.
• Greet your participant and discuss his/her goals for the day. Talk with family members, caregivers, or other resources if appropriate.
• Gear-up, and head out on the hill. Take breaks as needed.
• Break for lunch if it is a full day lesson. Please stay with him/her until you find their parent/guardian (if a minor or needs a caregiver), before you take your break.
• Full-day lessons, before going out after lunch, set plans with participant’s family or caregiver for the time and location to meet at the base lodge at the end of the lesson.
• Ensure that your participant connects with his/her ride home, and has all of his/her belongings.
• After the lesson, return the equipment and complete the participant’s Progress Report. Summarize the day, note any highlights or accomplishments, adaptive equipment used, lifts/runs etc.
• Check-in with the Program Manager if there are important items to note about equipment or the participant.

Goal Setting

Goal setting is an important aspect of programming in order to ensure that the participant is meeting his or her wants and needs. Before lessons or programming begins, have a conversation with the participant and/or his/her caregiver to discuss desires and expectations. It is important to note that goals might not always be directly related to the activity (skiing, snowboarding, etc.), and instead, may be social, emotional or physical in nature.

If possible, create SMART objectives. SMART objectives are Specific, Measurable, Attainable, Relevant, and Time-Bound. The more specific the objective is, the easier it is to hold each other accountable.

Examples of SMART objectives:
By the end of the series, _____ will attempt 3 “blue” runs.
By the third week, _____ will engage in appropriate conversation with two volunteers and one participant. _____ will demonstrate parallel turning by the end of the series.

Examples of ‘poor’ objectives:
_____ will get better at skiing.
_____ will have fun.

Attendance / Cancellations

If you are unable to attend an assigned lesson, please call the Program Coord. or ED as soon as possible: Andrea Goodrich: 207.756.4513 or Julie Tickle 716.785.1522

Cancellations
DREAM occasionally cancels lessons due to bad weather or road closures. If this happens, an attempt will be made to reschedule. Typically if the WMR Ski School is operational, then we will hold lessons. Additionally, if there are school closures Monday - Friday the school programs from those schools will not attend. Please call the program coordinator to check for any changes to the daily schedule.
Participant Guidelines Continued

2. Ensure that participants are dressed and protected from existing weather conditions. Never take participants into adverse weather with inadequate clothing or equipment.

3. During the lesson, check for cold or numbness in the extremities, signs of heat loss, and his/her comfort level. If you are concerned, bring the participant indoors.

4. Do not administer any medication, prescription or non-prescription to any participant.

5. Due to various participant dietary restrictions, do not provide meals or lend money to participants for meals. If a participant forgets his or her lunch or money, please see the school or group representative, parent or caregiver.

6. Ensure that the participant has the appropriate lift ticket attached to their person.

7. At the end of the lesson or day, it is very important that you complete a lesson report in the participant’s information folder. This process can be short and simple, but provide adequate information of the progress of the lesson to allow for the next volunteer to continue from that point forward.

8. Avoid any contact with body fluids (such as saliva and blood) without protection. If you experience an incident involving body fluids, get help from Ski Patrol and contact the program staff immediately.

9. If a participant informs you that he or she is being mistreated or harassed during any Dream Adaptive Recreation activity, report the incident to the executive director.

Accident/Incident Procedure Policy

1. **Get Help:** Don’t panic & do not leave the participant! Send one or more competent persons (preferably and adult) to get Ski Patrol. Have them note the exact location of the injured person so that they know where to send the Ski Patrol.

2. **Protect the Accident Site:** Cross your skis above the accident scene to clearly mark your location. Ask a bystander to assist you by hiking uphill a short distance to direct traffic away from the accident.

3. **Protect the Injured Skier:** Do not move the injured person except when it is necessary to protect them. In a life-threatening situation, apply immediate first aid to the best of your capability. Stop severe bleeding by direct pressure. If you are trained in CPR, begin artificial respiration if the injured person is not breathing. Treat for shock by keeping the injured skier warm, comfortable, and lying down until Ski Patrol Arrives. Once Ski Patrol arrives, they are in command of the scene. Stay calm, talk to the injured person; tell them what is being done to help. Obtain witness names, addresses and phone numbers. Don’t remove the injured skier’s skis unless you are sure you won’t aggravate the injury. Use extreme caution. If in doubt, don’t!! Try to keep the person warm. Never administer food, drink, or medication.

4. **Do Not Discuss the Incident:** Do not discuss the incident with anyone other than the program director, lead volunteer, or Ski Patrol. Do not give opinion, place blame, or admit guilt-just state the facts. Legal liability for an incident is never determined on the scene. If it becomes an issue, all relevant facts and circumstances are investigated and analyzed. Statements such as “I shouldn’t have …” or “I’m sorry” are usually interpreted as admission of legal liability that obscures other relevant facts. Go with the injured skier to the ski Patrol building. If you have more than one participant, go only after handing the other participant off to another volunteer. Provide Ski Patrol with the participant information form, if applicable, so that they are aware of any important medical considerations.

5. **Fill out an Incident Report Form:** Fill out an Incident Report Form with the Executive Director. No matter how small the incident may be, it’s important for the program staff to know about it.
   - Use legible writing
   - Use complete sentences
   - Be objective
   - Get the names and witness statements from all those who saw the incident
   - Complete the form as soon as possible after the incident, preferably within 24 hours
   - Follow up with the program staff and Ski Patrol as needed
Montana Good Samaritan Law

27-1-714. Limits on liability for emergency care rendered at scene of accident or emergency.
(1) Any person licensed as a physician and surgeon under the laws of the state of Montana, any volunteer firefighter or officer of any nonprofit volunteer fire company, or any other person who in good faith renders emergency care or assistance without compensation except as provided in subsection (2) at the scene of an emergency or accident is not liable for any civil damages for acts or omissions other than damages occasioned by gross negligence or by willful or wanton acts or omissions by such person in rendering such emergency care or assistance.  (2) Subsection (1) includes a person properly trained under the laws of this state who operates an ambulance to and from the scene of an emergency or renders emergency medical treatment on a volunteer basis so long as the total reimbursement received for such volunteer services does not exceed 25% of his gross annual income or $3,000 a calendar year, whichever is greater.

Risk Management  There are certain risks and dangers inherent in any activity.  The sport of adaptive skiing/boarding involves its own specialized set of risks.  The goal of these safety policies and procedures is to identify the risks that we face and to develop methods by which the risks can be controlled to provide a safe and fun learning environment. The following material provides an overview of the major points of risk management within Dream Adaptive Recreation’s winter programs.  This is not an exhaustive list; rather, this offers a baseline from which each individual volunteer should operate.

Medication Policy  DREAM volunteers are not authorized to administer medications to participants.

Helmet Policy  All DREAM participants, volunteers and staff must wear an industry approved snowsports helmet, and have it buckled, while on lessons and in DREAM trainings/clinics. This includes instances when you are teaching on snow in your boots without your skis or board on.

Seizure Policy  Any participant who has experienced a grand mal seizure within the last 24 months is required to wear a retention harness while riding the chairlift.  It is recommended that a participant who has experienced any other kind of seizure within the last 24 months wear a retention harness on the chairlift.

If your participant has a seizure while on the chairlift:
1.  Remain calm, and ensure your own personal safety before attempting to assist the person having a seizure.
2.  Do not attempt to hold the person.
3.  Notify the lift attendant before reaching the top that you will require a full stop to unload.  Do not unhook the retention strap from the chair until you have come to a full stop at the top of the chairlift.
4.  Ask the lift attendant to notify Ski Patrol.
5.  Once Ski Patrol has taken control of the participant’s well-being notify the program staff.

Equipment Policies

Tethering  There are many situations that may arise during an adaptive lesson where it may be helpful or necessary to use an assist (seat or hand: 2-point hold) or tethering system with a participant for the purposes of speed control and safety or for kinesthetic teaching applications.  DREAM instructors who have not received proper training and/or have not been approved by the Program Staff are not allowed to tether any adaptive equipment or stand-up skiers/riders.
Chairlift Loading & Unloading Policy

**General Loading Guidelines**
Always explain the loading procedure to the participant before loading a chairlift for the first time. Use common sense and focus on safety. Allow the participant to be as independent as is safely possible.

- Perform a dry run with the lifting assistant when loading sit equipment, and make sure the retention strap is readily available.
- Tethers: Sit ski instructors must not be attached via tethers to the sit ski while loading and on the chair lift. Tip tethers for standup skiers/riders must be removed from the participant’s equipment prior to loading.
- Fixed outriggers must be removed from the bi-ski prior to reaching the loading area.
- The instructor and the lifting assistant must communicate with the lift operator, as well as with each other. Typically, the person with the best view of the chair counts out loud for the load.
- Use proper lifting techniques. Lift with your legs, not your back.
- If the participant is too heavy for you to lift, get help or switch participants. Do not attempt to lift loads that are too heavy for you.
- All participants with hand-held outriggers (stand and sit) unload with the outriggers in the skiing position—this is to prevent any potential shoulder injuries during the unload.
- Participants skiing with a snow slider should use the slider to get to the loading ramp. The participant may ride the chairlift with the slider resting across his or her lap, or the slider may be passed off to an assistant instructor who will carry it up the chairlift on a different chair. The student should not be attached the the slider in anyway when on the lift. Once on the chairlift, the slider must be tethered to the chair.
- If the chairlift that you’re riding has a safety bar, you must lower the bar while you’re riding the chair. This policy applies to all participants and instructors, regardless of any equipment or adaptations in use. If you’re unsure how to lower the bar while using a specific piece of equipment (such as a sit-ski or the slider), please ask.

**Loading Speeds**
- Each chair has a different capability for varying speeds. The instructor is responsible for determining which speed is best for each load/unload.
- Prior to entering the loading ramp, notify the lift attendant of your desired speed for the load and unload, as well as any special instructions. For example: “I would like a slow at the bottom, and a full-stop up top. Can I please have a pull back?” Please Note: If you ask for a “pull back” make sure there is another lift attendant available to stand near the “stop” button in the event of a mis-load. It is not recommended that you ask for or receive a “pull back” if there is only one lift attendant at the bottom of the chairlift.
- It is the instructor’s responsibility to make certain that the lift attendant knows the desired speed for the load and unload before entering the loading area. Never Assume that the lift operator knows what you want, or that he or she will remember what speed you took for your last run. Be clear and always communicate.
- It is acceptable to let empty chairs to pass if either the instructor or participant is not ready to load.
- If a mis-load is inevitable, signal to stop the chair immediately to avoid making the situation worse.

**Retention Straps**
All participants using a sit-ski, as well as all participants wearing a retention harness, must be secured to the chair by a retention strap. The retention strap should be wrapped around a primary structural component of the chair, and the carabiner is then attached back onto the safety strap itself.

Please note:
- The thin metal slats on the backs of chairs are not part of the chair’s primary structure. Therefore, the retention strap should not be attached to these slats.
- Do not use a locking carabiner to attach the safety strap around the chair. Locking carabiners may freeze when locked, preventing an unload.
Retention Straps Continued

- When loading, make certain that the participant is as far back on the chair as possible. Attach the participant’s retention strap to the chair as soon as possible, and ask for a STOP if attaching the strap becomes an issue.

Unloading Guidelines

Explain the unloading procedure to the participant prior to unloading. You should also keep the participant aware of when they are and are not attached to the chair. Unloading takes practice. Begin with full stop or slow until unloading becomes more comfortable.

If the safety of the unload is in jeopardy, remain on the lift and notify the lift operator to stop the chair. Never jump from the chair lift.

As you approach the top of the lift, make visual contact with the lift operator and indicate your desired speed for the unload (stop, slow, full speed) using hand signals. The lift operators at the top have been instructed to follow your hand signal.

Hand Signals:

- Full Speed: Thumb up
- Slow/Half Speed: Thumb down
- Full Stop: Arm extended, palm facing the lift operator

The timing for when you should unlock the carabiner, unwrap the retention strap and raise the chairlift bar depends on each specific chairlift.

Chairlift Emergency Procedures

- Stay calm, and stay in the chair. Never attempt to remove yourself or your participant from chair.
- Talk to your participant and keep him or her calm.
- Wait for Ski Patrol. Ski Patrol will walk you through the evacuation procedure step by step.
- If your participant uses a retention strap, keep the strap secured until they are securely connected to the evacuation line.
- Never drop anything (skis, handheld outriggers, etc.) from the chairlift unless told to by Ski Patrol.

PLEASE REMEMBER: When in doubt, seek advice from a lead volunteer or program staff.

Emergencies- Whitefish Mountain Resort Ski Patrol

Members of Whitefish Mountain Resort Ski Patrol should be contacted in case of emergency. There is a phone number on all tickets, posted at the bottom and top of all lift terminals, and in the First Aid rooms located in the base area. When reporting an accident, give the exact location of the accident and any landmarks of the area. To the best of your knowledge, give the extent and/or nature of the injuries. The patrol person may ask you to maintain your position until the injured party is located. In the event that someone is injured in an accident, cross your skis upright in the snow above you and send someone for assistance. See a ski area map for location of Ski Patrol Stations and lift terminals for phone access.

Return of Property

Volunteers are responsible for DREAM Adaptive Recreation equipment and coats/vests that may be provided during lessons or programs. Once the lesson/program is complete, return the equipment to the proper storage area. If you notice an issue or malfunction with any equipment, please notify the program staff immediately.
Adaptive Disciplines & Equipment

The following information is intended to give you a working understanding of adaptive skiing equipment and terminology. This material will be much easier to comprehend once you begin working with the equipment, so don’t overwhelm yourself by trying to commit it all to memory.

Conventional Alpine Skiing
Conventional 2-Track skiing leaves two tracks in the snow using two skis and often two poles. *Individuals with the following disabilities often two track ski - visual impairment, brain injury, developmental disability, cerebral palsy, below the knee amputee, arm amputee, multiple sclerosis (MS), learning disability, and post polio.*

4-Track Skiing
*With Outriggers:* This is when a participant stands on two conventional skis using 2 hand-held outriggers which look like crutches with small skis on the bottom. Outriggers provide extra support and balance. *Individuals with the following disabilities often four track - cerebral palsy, post polio, brain injury, muscular dystrophy, MS, ortho impaired, and spina bifida.* (Figure 1)

*Snow Slider:* This highly adjustable piece of equipment looks like a walker on skis, and is used in addition to a participant’s own skis. It is a successful piece of equipment for individuals who have good upper body strength but require extra support to stand. To control turns and speed, the slider can be held from the sides using instructor bars or it can be tethered from behind. A safety retention device is always needed as the slider cannot stop of its own. *Individuals with the following disabilities often use a slider - cerebral palsy, MS, or those who have had a stroke.* (Figure 2)

3-Track Skiing
This is when a participant leaves 3 tracks in the snow, standing up, in a combination of skis, poles, and/or handheld outriggers. Outriggers provide extra support and balance. *This method of skiing is common for amputees.* (Figure 3)

Mono-skiing
In this discipline a skier is seated. The molded seat and foot support are mounted on a shock absorber attached to a single ski. Outriggers are used by the skier to maintain balance. Mono-skiers have strong upper bodies and limited or no movement from the waist down. They should be able to use outriggers to move the ski on the flats and uphill slopes as well as lift and rotate the ski while seated in it. *People with lower level injuries including paraplegia and ortho impairments most often use the mono-ski.* (Figure 4) Mono-skiers must be able to perform the following tasks:  
Trunk: While sitting, bend down and sit back up.  
Trunk Rotation: Twist body with arms up.  
Lateral Movement: While sitting, pick up an object off the floor on either side of the chair.  
Upper Body Strength: Resist hands being pushed forward, backward, side-in, side-out, and up and down. The participant should also be able to lift him/herself up into the wheelchair.  
Grip Strength: Grasp both of assessor’s hands firmly.

Bi-Skiing
Similar to mono-skiing, in Bi-Skiing the seat is mounted onto two asymmetrically cut skis. A bi-ski provides more stability than the mono-ski, as it has a wide base of support and a relatively low center of gravity. It is equipped with optional fixed outriggers which control lateral stability and assist in defining the arc of the turn. Some advanced skiers may use individual handheld outriggers (not fixed), self-load, and ski untethered as long as they can self-arrest the ski. (Figure 5)
Bi-Skiing Continued
If fixed outriggers are attached to the bi-ski, a qualified instructor must tether the skier. When being tethered or using fixed riggers, bi-skiers should stay on beginner terrain (Green and mellow Blue). Individuals with the following disabilities often use a bi-ski: high-level spinal cord injuries (C1 - T7), quadriplegia, and people with severe MS, MD, CP, spina bifida, unilateral or bilateral leg amputation, traumatic brain injury, epilepsy, stroke, cognitive and intellectual disabilities.

Visually Impaired and/or Deaf/Hard of Hearing Skiing or Riding
This is when a participant is visually impaired and/or Deaf/Hard of Hearing. Normally this participant is capable of conventional alpine skiing or snowboarding. Brightly colored vests are worn by the participant and the guide to make them visible to the public. Communication and teamwork is key in these disciplines. Guiding language and techniques must be solidified with the participant prior to getting on snow.

Snowboarding
There are adaptive techniques to use in adaptive snowboard lesson. Equipment can be used to facilitate ideal efficiency of movement while riding, using a combination of outriggers, harness, tethers, bamboo poles, and other adaptive equipment. People with amputations or cognitive and intellectual disabilities often find success with snowboarding.

Additional Tools/Equipment Explained

CADS
CADS are a system by which weight is taken off of the legs by means of a rubber band, a stick, a string, and a harness. The rubber band and the string lift the weight off the legs and on to the stick. That converts the weight the legs had borne into a force down on the ski. The lifting force generated by CADS decreases leg muscle fatigue, knee strain, and lower backs strain. The downward force generated by CADS increases edging power, snow contact, glide speed, and control. CADS are effective bionics because they reduce perceived gravity, assume much of the load-bearing role, and accordingly dramatically reduce the physical requirement. CADS are particularly useful for individuals with MS & Other Neuromuscular Diseases (Figure 6)

Outriggers
Outriggers are adapted forearm crutches with ski tips mounted on the bottom. Outriggers provide extra balance mobility, and turning maneuverability that a standard ski pole doesn't. They are height adjustable and can convert to walking crutches or poles in the “up” position. They aid the skier in balance, mobility, and turning. Outriggers come in sizes for stand-up (3 and 4 track skiers) or for sit skiers. (Figures 7-9)

Ski Bra
A rigid tip retention device used to hold the tips of the skis together causing the skier to ski on opposing edges (wedge). (Figure 10)

Edgie Wedgie®©
A lightweight (6") piece of rubber tubing with a small clamp and a thumb screw at each end. It does not prevent the ski tips from crossing, but loosely holds the tips together. This helps the skier to ski on opposing edges (wedge). (Figure 11)
**Spacer Bar**
A heel stabilizer made from a hollow piece of tubing (often PVC pipe) with a bungee cord running through it. The spacer bar attaches under the ski boots at the heels and helps the skier keep his/her skis from crossing or getting too far apart. When using a spacer bar, you should ALWAYS use a tip stabilizer, such as a ski bra or slider. (Figure 12)

**Tether**
This is a piece of tubular webbing used to aid a participant with snowsports movements. Tethers can be attached to the ski-bra or sit-ski to control the turn shape and speed of the participant. Tethers should always be secured to instructor with a girth hitch, under all clothing, making direct contact with skin. (Figure 13)

**Ski-Pal®**
An adjustable, oblong-shaped, heavy-duty tube that can be used to assist a stand-up skier or snowboarder control speed and initiate turns. (Figure 14)

**Bamboo Pole**
Bamboo poles or lengths of PVC pipe that can be used by the instructor and participant to aid in snowsports movements, such as providing a sense of security for a participant who is nervous, developing turn shape, assisting with speed control, or perhaps guiding a participant with a visual impairment. (Figure 15)
Figure 7: Hand-held outriggers for mono-skiers.

Figure 8: Hand-held outriggers for bi-skiers.

Figure 9: Hand-held outriggers for 3 and 4 track skiers.

Figure 10: Ski Bra

Figure 11: Edgie Wedgie

Figure 12: Spacer Bar

Figure 13: Tethers, girth hitched

Figure 14: Ski Pal

Figure 15: Bamboo pole
American Teaching System

DREAM believes in focusing on an individual’s abilities, rather than their disability. Instructors should actively teach all individuals how to ski/ride by encouraging the highest level of independence. Whether teaching children or adults, it is important to teach to the whole person, always trying to incorporate the cognitive, affective (emotional) and physical makeup unique to each participant.

The safety of the participant must remain the primary concern of every instructor. Unless the participant feels that he or she is in a safe and secure setting, learning and fun cannot occur. DREAM uses the American Teaching System (ATS), developed by the Professional Ski Instructors of America (PSIA), as the foundation for our approach to teaching people how to ski and snowboard. It is a progression oriented, outcome based and participant centered teaching format. Or put another way, an individual’s skiing or riding skills build upon one another based upon the participant’s needs.

Principles and Philosophies of ATS

Participant Centered – The lesson topic is based on the participant’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 participant and instructor develop the lesson topic together
Guest Service Driven – Participants are guests. They deserve a professional level of service

Exceptional teaching is a blend of artistry and science. The art is the “how” of the lesson: your ability to present the lesson material in an interesting way. The science is the “what” of a lesson: the technical content.

ATS represents both the art and science of teaching. This system consists of three components:

1. Teaching Model- Teaching and learning theories
2. Service Model- Customer relations
3. Skiing/Snowboarding Model- Technical Mechanics

1. Teaching Model

The ATS teaching model provides a framework for planning lessons and making professional decisions about how and what to teach your participant so that he or she can meet his or her goals. The teaching model addresses each person involved in a lesson, including you as the instructor. Most importantly, the teaching model helps you identify and meet the needs of the participant. The three key areas that impact participant outcomes are Instructor Behavior, the Participant Profile, and Lesson Content.

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**Instructor Behavior**
- Introduce the learning segment
- Assess the participant
- Determine goals and plan objectives
- Present and share information
- Guide Practice
- Check for understanding
- Summarize the learning segment

**Participant Profile**
- Characteristics and background
- Learning preference
- Motivation and desire
- Beliefs, attitudes, and values
- Emotional state

**Lesson Content**
- Focus on developing skills
- Use progressions and exercises
- Provide appropriate feedback
- Develop analysis
- Pace lessons
- Choose appropriate terrain & conditions

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ATS Continued:

2. Service Model

The basic principle behind the service model is to treat everyone as guests who you want to come back! Some of our participants & their families might only visit for a few days or have one lesson. We want them to have fun, feel supported, and have a positive experience.

Five Secrets to Successful Customer Service

- See yourself from the customer's perspective
- Be an active listener
- Positively exceed expectations
- Recover from service inconsistencies
- Have fun doing what you are doing

As adaptive instructors, we need to address more than just the participant’s abilities and challenges. We must take the time to communicate with our participants and involve them in planning an appropriate lesson. Consistent two-way communication is the best way to reach and maintain a good understanding. By creating an ongoing exchange of thoughts and feelings during the lesson, you will be certain to accurately assess and understand what your participant expects from you, and you will consequentially be better able to exceed their expectations.

3. Skiing / Snowboarding Model - Technical Mechanics

ATS is built on the principle of a participant-centered learning partnership that adheres to a guiding set of skiing and snowboarding mechanics.

There are five fundamentals of skiing that relate to every desired outcome for all skiers, including those using adaptive equipment:

1) Control the relationship of the center of mass (CM) to the base of support (BOS) to direct pressure along the length of the skis.
2) Control pressure from ski to ski, and direct pressure to the outside ski.
3) Control edge angles with a combination of inclination and angulation.
4) Control the skis’ rotation with leg rotation, separate from the upper body.
5) Regulate the magnitude of pressure created through ski-to-snow interaction.

The technical model of American ski instruction is based on the knowledge that three skills—rotation control, edge control, and pressure control—are integral to all turns, and essential for maintaining balance.

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.

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 participants 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.

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.
**Intermediate Phase**

*Level 5*
- Perform a wedge Christy on all green and easy blue terrain.
- Starting to show an open parallel turn as a result of blending skills.
- Starting to develop independent simultaneous leg rotation.
- Matching the skis before the fall line.

*Level 6*
- Developing upper body/lower body separation.
- Introduction of poles.
- Developing a strong balanced stance through mountain exploration.
- Build confidence in parallel turns.
- Perform different sized turns on various terrain.

*Level 7*
- Develop and refine the use of poles to aid in turning force and balance.
- Use terrain to aid in turn shape and balance.
- Starting to integrate foot/foot pressure.
- Make various turn shapes and radius sizes.
- Use of poles to aid in rhythm and upper/lower body separation.
- Developing confidence on blue and black terrain.

**Snowboarding**

*Beginner Riders* – Stance and balance, Skating, Straight Gliding, Traversing on both edges, Garlands C turns to a Stop, Lift Loading/Unloading, S Turns. Beginners are still trying to get the fundamentals down, learning to make heel side turns, toes side turns and stopping on purpose. A beginning snowboarder is still learning to link turns comfortably. Beginner riders are comfortable on green and easy blue terrain.

*Intermediate Riders* – Intermediate riders are linking turns with some skidding, but are working toward smoothing out the turns on relatively non-steep terrain. They are focusing on using the edges to carve, riding switch and navigating more difficult terrain (blue and easy groomed black runs).

**Continued Education!**

DREAM is committed to helping you along your instructor journey. We offer *free* clinics throughout the season for personal ski/ride improvement. Additionally, should you want to become a certified instructor which we encourage, DREAM will facilitate your prep clinics and exams, and cover all costs except for your PSIA/AASI annual dues. For those who obtain their Level 1 certification & volunteer 10+ days that season, DREAM & WMR will provide you with a free season pass for the following season if you continue to be involved!

For more detailed information about technical ski and snowboard progression and drills, consult the PSIA Alpine Manual and AASI Snowboard Manual.

All hardcopies are available through DREAM and can be checked-out. You may also purchase a personal hard copy or digital version through the PSIA website: thesnowpros.org

Visit our volunteer resource web page for additional information: dreamadaptive.org/volunteerresources
Thank you for taking the time to read the Winter Alpine Program Volunteer Training Manual. We hope you find enjoyment in sharing your passion of skiing and riding with others this season. DREAM staff is always available for questions and is happy to provide additional information. We greatly appreciate and welcome feedback.

Resources for this manual:

PSIA-AASI Adaptive Alpine Technical Manual 2017 - thesnowpros.org
Outdoors for All, Winter Training Manual - outdoorsforall.org/get-involved/training/
Higher Ground Sun Valley, Snowsports Manual 2015 - highergroundusa.org

Thanks to all organizations who post their information online to promote education and information sharing!

**DREAM Adaptive Recreation**
PO Box 4084
Whitefish, MT 59937
(406) 862-1817
info@dreamadaptive.org
• All connecting points of a tether or safety strap are required to be “load bearing” as per the industry standard.
• Tethered sit-ski equipment is limited to green and blue terrain. Tethered stand-up skiers / riders are limited to green terrain.
• Instructors tethering stand up skiers and riders are required to be tied in with two points of direct contact via girth hitch tied directly to the skin on the wrist of the instructor.
• Seat-assist sit skis must be tied in with at least one point of direct contact via girth hitch tied directly to the skin on the wrist of the instructor.
• When tethering bi-skis, tethers must be connected to manufacturer recommended points. It is also recommended to use carabiners to attach tethers to frame of the bi-ski.
• Tethered sit skis are required to employ a secondary direct point of contact to the instructor when using fixed outriggers on the bi-ski, during the use of the slider, and is recommended in all other tethering situations.
• Tethers must be removed from instructor’s wrists when loading a chair lift.
• Tethers must be removed from a standing skier / rider when loading a chair lift.

Sit Ski Equipment Policy
• Seat assisted & tethered sit-ski equipment should not travel faster than the general pace of other skiers using the same terrain.
• DREAM instructors who have not received proper training and/or have not been approved by the Program Staff are not allowed to lead sit-ski lessons.
• All sit-ski equipment must be equipped with an evacuation system.
• All sit-ski equipment must be equipped with a chairlift retention strap and carabiner.
• It is required for beginner/intermediate sit-ski equipment (with or without passengers) to be clipped into the chairlift before passing the first free standing lift tower and remain clipped in until the last free standing lift tower before the unloading terminal, and is recommended for all other sit-ski equipment. The exception is Chair 6, as often there is not enough time to clip and unclip the retention strap.
• If the chairlift that you’re riding has a safety bar, you must lower the bar while you’re riding the chair. Take caution that the bar is not putting pressure on the participant’s legs.
• Sit-ski equipment is not allowed to be seat assisted or tethered by instructors who have not received proper training. All sit-ski instructors must be checked & approved by the Program staff.
• Seat assisted sit-ski equipment is limited to green and blue terrain unless prior approval is given.
• All seat assisted sit-ski equipment with or without passengers must have at least one short retention strap attached to the wrist (direct to skin) of the instructor via a self-tightening knot (girth hitch) on one end and to the frame of the unit or other acceptable attachment point (tether attachment loop or chair lift retention loop) on the other end. This is not required while pushing through a lift line.
• ALL DREAM adaptive equipment is not permitted to leave the ground (get air) intentionally.

Slider Equipment Policy
• DREAM instructors who have not received proper training and who have not been approved by the Program Staff are not allowed to lead slider lessons.
• Siders are required be tethered with 2 points of direct contact at all times except while in the lift-line & on lift.
• Instructors tethering a slider must have the tether attached by 2 carabiners clipped to the “D” rings in the CENTER of the slider, not the bottom. The D rings should face away from the participant (downhill) so as to give the instructor more leverage.
• Sliders are only to be used on Green terrain. Special blue runs may be approved by program staff.
• If the chairlift that you’re riding has a safety bar, you must lower the bar while you’re riding the chair. Take caution that the bar and slider is not putting pressure on the participant.
• ALL DREAM adaptive equipment, including the slider, are not permitted to leave the ground (get air) intentionally.
Instructor Behavior - The Teaching Cycle
The following general strategies will be useful when teaching all adaptive alpine participants, no matter their diagnosis/disability.

- Be sure you have the participant’s focus and attention when you give a direction or ask him or her to do something. Keep in mind that high expectations tend to produce better results.

- Use a calm voice and make explanations simple, clear, and concise. Avoid long, technical words or jargon. **Check for understanding frequently.**

- Give one or two step directions, rather than multi-step ones. For example, teach one task at a time using small, sequenced steps; break down complex tasks into smaller steps.

- Clearly define the lesson structure verbally, and if appropriate, use a picture schedule or checklist.

- **Demonstrate or model** tasks whenever possible.

- Turn tasks into games.

- Introduce and practice skills off the snow or on flat terrain before transferring the skills to the snow or more difficult terrain.

- Use adaptive tools, such as ski tip connectors and/or tethers that provide kinesthetic support when teaching a skill.

- Allow plenty of time for your participants to practice and correct skills through repetition, making sure they’re comfortable with one learned task or skill before introducing a new one.

- Provide frequent reinforcement of effort.

- Set short-range goals with favored reinforcement upon completion.

- Provide frequent brain and body breaks.

- Don’t assume your participants will act and respond the same way from day, or lesson, to the next.

- Avoid or be aware of areas that can cause distraction or over-stimulation, such as:
  - Busy areas of the lodge, Large crowds indoors or on the snow, Runs with or near snow guns
Participant Profile
Before you think about having your participant get geared up, it is important that you assess your participant’s strengths and challenges.
- Determine your participant’s level of cognition and preferred learning style(s), and any effects they might have on communication, your teaching style, and lesson progressions.
- Gain an understanding of your participant’s goals to help plan safe and fun activities that lend themselves to successful learning.
- Perform assessments of your participant’s physical abilities and limitations, leverage abilities, and be proactive in addressing any safety or other challenges.

Learning Styles
Different people have different ways of absorbing and processing information. It is our responsibility to create a learning partnership with each participant. There are four main classifications of learning styles:

- **Doer** - Doers tend to be practical and want to experience a new task more than they want to hear about it. Doers learn best by experiencing the task themselves through trial and error. They don’t want to stand around listening to lectures; they want a concrete experience.
- **Watcher** - Watchers are visual learners who want to see good demos, perform accurately and at task level. Watchers learn by seeing others do it before trying to imitate it. They want to hang back and watch and think about the task before trying it. Use verbal images when explaining.
- **Thinker** - Thinkers are often auditory learners who want clear, concise descriptions. They want to understand "why" they are performing a task; they need the abstract concepts to understand most effectively. Be precise and to the point. Thinkers need to analyze the situation before trying it. Consider giving thinkers additional technical information on the ski lift. Ask questions to allow the thinker to verbalize and understand the lesson.
- **Feeler** - Feelers are kinesthetic learners who can tell the difference in how different tasks feel. They learn best by actively experiencing sensations. Hands on positioning (with permission) can be very effective because feelers need sensory feedback. Show and describe what they should "feel." Feelers want to break things down and feel the pieces. Let feelers try to describe what they feel when they perform a task.

Although we all have a dominant learning style, we learn best from a variety of learning experiences. If a participant is struggling to learn something, try presenting the material in a way that appeals to a different learning style.

Lesson Content
Focus on developing sound skills through fun and games. Work on your bag of “tricks”. Try to learn one new game each week that emphasizes a skill.

Follow “Safety+Fun=Learning”. Teach your participants on terrain where they are comfortable and can learn new skills. Move participants 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, participants 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.

Pace your lesson appropriately. Spend time developing foundation skills (Rotary and Balance). Make sure your participant has lots of mileage and practice time. Never rush a participant through steps or to more difficult terrain. Spending time helping a participant master a skill gives that person a sense of accomplishment AND makes it easier to teach him/her new skills. Look for signs of fatigue: deterioration of skills, change in behavior, decreased attention, yawning. Take a break! Rest before your participant gets tired.
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 participant more control over the shape of the turn.

The AASI Snowboarding Model is broken into Fundamental Movements (how the rider moves) and Performance Concepts, (how the snowboard interacts with the snow).

Fundamental Movements
- Balance
- Rotation
- Flexion and Extension

Performance Concepts
- Tilt (edge angle)
- Twist (torsional flex)
- Pivot (rotation)
- Pressure Distribution, (front to back, side to side and weighting and unweighting)

Fundamental Movements
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.

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 participants may need to steer with their shoulders to guide the board. As participants progress and become more comfortable on their board, foot steering becomes a priority.

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 enhance speed control and give shape to turns.

Performance Concepts
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.

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.

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.
The Center Line zones are based on a combination of the fundamental skiing skills and the development of ski turns. There are four basic zones: wedge, wedge-christie, parallel, and dynamic parallel. Each zone builds on skills and movement patterns acquired in the previous zone. Part of your assessment of the participant includes determining which Center Line milestones to start with and prioritizing which skills to focus on. With beginning participants, always start with flatland drills. Flatland drills are essential to developing the fundamental skills. If your participant has skied before, you need to identify where in the skiing model the participant fits and create a lesson that will help the participant continue to make progress. Regardless of the participant’s disability or the skiing discipline (two-track, three- or four-track, mono-ski, bi-ski), all participants work through the Center Line milestones. In some cases, adaptive equivalents exist.

**Center Line Milestones**

The Center Line zones are based on a combination of the fundamental skiing skills and the development of ski turns. There are four basic zones: wedge, wedge-christie, parallel, and dynamic parallel. Each zone builds on skills and movement patterns acquired in the previous zone. Part of your assessment of the participant includes determining which Center Line milestones to start with and prioritizing which skills to focus on. With beginning participants, always start with flatland drills. Flatland drills are essential to developing the fundamental skills. If your participant has skied before, you need to identify where in the skiing model the participant fits and create a lesson that will help the participant continue to make progress. Regardless of the participant’s disability or the skiing discipline (two-track, three- or four-track, mono-ski, bi-ski), all participants work through the Center Line milestones. In some cases, adaptive equivalents exist.

**Flatland Drills**

Learn to walk, stop, climb, straight run, stop and turn. Learn all of the basic movements statically. Allow the participant to focus on balance and getting used to the new environment in a safe location. Develop excitement for a new sport or an old one. Introduce the concept of the wedge. There are two kinds of wedge: gliding wedge (skis in wedge with little edge allows skis to continue moving) and braking wedge (size of wedge and edge angle stops the skier). Flatland exercises provide the foundation for all other skills and movements. Do not rush the participant through the flatlands or you will jeopardize all future progress. **Primary skills focus = balancing movements!**

**Wedge Turns**

A wedge provides a more stable platform. For participants using only one ski or who cannot create a wedge, outriggers are used to provide the additional stability. The body stays basically centered over the skis. A slight extension toward the new turn facilitates turn initiation as ski(s) are steered into the fall line.

Build confidence, work on control with linked round wedge turns, and maintain slow and consistent speed. Guide ski(s) actively, staying in a wedge throughout the turn. Maintain a flat ski. Add gradual direction changes until skier can turn to stop. The participant is ready to move to the chairlift only after the participant can successfully turn and stop on command. **Primary skills focus = rotary movements!**

**Wedge-christie turns**

Use wedge to initiate the turn, completing the turn with skis more parallel. As the skier progresses, the wedge becomes smaller and the matching of skis happens earlier in the turn. The turn is still initiated with slight extension, combined with more active steering of the ski(s). Mileage is very important during this phase. Increase speed and link turns rhythmically. Beginning wedge-christie turns: Reduce size of wedge and control speed by varying turn shape. Match occurs at the completion of the turn. **Primary skills focus = rotary movements of inside ski, hill increases edge angle**

**Intermediate wedge-christie turns:** Earlier matching of skis, increased speed, improved balance, varying terrain and snow. Increased focus on the rotary movements of the inside ski. Skidded turns. **Primary skills focus = balancing movements (over smaller base), rotary movements (guiding inside ski)**

**Advanced wedge-christie turns:** Match skis before the fall-line. Discover new runs and terrain. More mileage. Begin more dynamic pole usage. **Primary skills focus = rotary movements (active steering), more dynamic balancing movements, more dynamic pressure-control movements**
**Turn Shape**
All turns have shape. It can be round like a C smooth like an S, asymmetrical like a J or angular like a Z. Turns also have size (radius), from short and quick to long, using more of the slope.

![Shapes and Radii](image)

- C Shape
- S Shape
- J Shape
- Z Shape
- Small Radius
- Medium Radius

**Movement analysis** is the process of assessing a participant's skiing ability in terms of the movement patterns and skills concepts and then identifying cause-and-effect relationships. As the instructor, you compare your participant's performance to the Center Line reference maneuvers. Movement analysis is used to provide feedback to the skier and to help determine the lesson plan. As you watch your participant skiing, observe how the participant achieves rotary, edging, and pressure control movements. Is there a skill that is dominant? Is there a skill that is lacking? Determine how the skier initiates a turn. Is it the most efficient way to initiate a turn? Does it interfere with later phases of the turn? How does the skier finish the turn? Can the skier control speed through turn shape?

After observing what is happening in the skier’s performance, determine the cause-and-effect relationship between what you see and what the skier’s body is doing while skiing. Identify what the problem is. For example, the skier might not be finishing the turn. Next, look at why the problem occurs. Look for the root cause. Is it because the skier is using upper body rotary skills to initiate the turn so the body is out of position to efficiently complete a turn? Is it a lack of active steering during the turn?

Observe the skier’s performance in a variety of terrain and conditions. Look for patterns. Provide feedback to the participant, including good feedback. Always point out what the participant is doing correctly. There will be times when the cause of a problem is a combination of issues. In this case, focus on the primary skill first and provide exercises that will develop that skill. For beginning skiers, it is important to keep things simple. Only work on one skill at a time and allow enough time for that skill to develop fully.

In many of our participants, the number one issue is balance. This is why the flatland exercises are so important to the participant’s ultimate success. In some cases, you may need to return to some simple balance drills to develop better balance.

Movement analysis should be performed throughout the lesson. Continually assess the participant’s performance and modify the lesson plan as needed. Prioritize the skills the participant needs to work on. Make sure you communicate with the participant about the changes in lesson plans or goals. To appropriately analyze your participant’s skiing, you need a sound understanding of the mechanics of skiing. Analyze the different phases of the turn and identify how the skills are used during those phases.

PSIA has developed a set of visual cues that describe both efficient and inefficient skiing. These cues address the skills that are present in all levels of skiing. As a skier becomes more advanced, the skills are applied more dynamically and consistently.
Parallel turns
The turn is made on corresponding edges and skis match throughout the turn. Begin open stance parallel with pole plant. Vary turn shape and speed control. Perform early weight transfer with dominant outside ski. Actively guide ski(s) throughout the turn. Begin to anticipate next turn, more dynamic pole use, progressive steering.

Primary skills focus = begin blending all skills more dynamically and efficiently

Dynamic Parallel turns
More carving than skidding of skis. Dynamic refinement of movement patterns. All movements contribute toward carrying the energy from one turn to the next. Short-radius parallel turns in the fall line. Medium- and long-radius carved parallel turns across the fall line. Use an integrated, efficient combination of skills.

Primary skills focus = balancing movements (lateral), rotary movements (accomplished through steering not pivoting), edge-control movements (the smaller the turn radius the higher the edge angle), pressure-control movements (pressure on “new” turning ski before turn initiation).

How Does a Ski Turn?
There are two types of turns: skidded and carved. The difference lies in the primary skill used to create each turn type.

Skidded turns — The ski is turned primarily by rotary forces generated by the skier and transferred to the ski by the boot/binding system. This turn is controlled by the part of the body generating the turning forces, such as the shoulders, hips, knees, feet or whole body. A skidded turn is the result of the skis moving forward and sideways simultaneously.

Carved turns — The ski is turned by function of ski design when placed on edge and pressure is applied. This turn is controlled through constant regulation of pressure and fine motor movements adjusting the center of mass relative to the center of the turn. In a carved turn, the skis travel on edge with a minimum of lateral slipping or skidding. Pure carved turns display clean, long arcs in the snow.

For the beginning skier, we teach a skidded turn where the focus is primarily rotary skills. Therefore design a lesson plan that develops rotary skills to enhance a smooth round skidded turn. As the skier becomes more proficient in blending the skills, edging and pressure movements are combined with rotary. As a result, less skidding occurs and the skier begins carving turns.

Anatomy of a Turn
Turn shape is the form of the turn arc (the path that the skis travel through the turn). A ski is turned through a combination of balancing, rotary, pressure control, and edging movements. The phases of the turn and turn shape:

Initiation Phase (turn begins, the body moves over the skis, edge change and weight shift)

Shaping Phase (guiding of the skis, through the apex of the turn)

Finishing Phase (complete the turn and prepare for the next)
Visual Cues to Efficient Body Movements in Skiing

The visual cues presented here were developed by PSIA to help with movement analysis. Although originally intended for standard alpine programs, you'll see that skiing is skiing. As you work with participants who have a disability, you will discover that the same basic principles apply. The primary difference for adaptive skiing is where the forces come from. For example, a mono-skier uses outriggers and the upper body where a two-track skier would use ankles, knees, and hips.

This information is intended to be an analytical tool and a reference for good skiing in most ski instruction situations. This guide defines the basics of skiing that should be the foundation of movement for all skiers. Adaptive skiers use the same general movement patterns when skiing, except some skiers use different parts of the body to accomplish the same result. In general, substitute the available body part that is closest to the snow.

**Flex and extend all available joints to balance over the whole foot as you control pressure on the skis so you can flow with the terrain.**
The outside ski bends from the middle.
The shins maintain contact with both boot tongues.
The body flows continuously with the skis.
The skis flow over the terrain.
The skier exhibits fluid motion as a result of continuous and coordinated movement at joints.

**Use diagonal (forward and lateral) movements of the feet, legs, and hips to engage and release the edges of the skis.**
The skis tip on edge early in a turn.
The shins contact both boot shafts forward and laterally.
The edges are released and engaged with one smooth movement.
Ski lead change occurs before you enter the fall line.

**Direct your balance to the outside ski in a turn.**
The outside ski bends more than the inside ski in a turn.
The shoulders stay level to the horizon or they level out through the turn.
The inside half of the body leads the outside half through the turn.
The inside leg is flexed more than the outside leg in a turn.

**)Turn your legs under your body to help you guide the skis through a turn.**
The legs turn more than the upper body.
Turning movements originate in the feet and legs.
The upper body is stable and quiet.

**Direct your upper body and swing your pole to flow with the skis through turns.**
The hands are forward.
The inside hand, shoulder, and hip lead through a turn.
The shoulders are forward of the hips.
The pole swings smoothly in the intended direction of travel.
Vision is forward and the eyes look to the intended direction of travel.
Pole touch/plant complement the desired turning outcome.
Levels of Skiing and Riding

When looking at the levels of skiers and riders, understand that the levels of skiing and riding are movement based, NOT outcome based. For example, there are skiers that might go direct to parallel skiing on their first day, so traditional “Day 1” expectations or outcomes in skier/rider progressions is now not applicable.

In Skiing, the 3 phases are broken down into 9 levels, each with specific steps to describe a skier at that level. This 9-tier system for skiing is used by many snowsports resorts around the United States.

DREAM provides beginner to intermediate levels of instruction (Levels 1-7).

1) Beginner Phase: Levels 1-4
2) Intermediate Phase: Levels 5-7
3) Advanced Phase: Levels 8 & 9

Beginner Phase

Level 1
-Orient participants with equipment, environment and culture of skiing.
-Establish a base of support, develop a balanced athletic stance.
-Perform standing, walking, gliding, climbing and straight run movements.
-Learn how to get up after a fall.
-Become familiar with the idea of “fall line.”
-Develop an excitement for the sport.

Level 2
-Perform and develop wedge movements.
-Learn various wedge sizes.
-Learn to slide on the snow surface and ownership of magic carpet terrain.
-Improve control of direction and speed.
-Learn how to ride the chairlift.

Level 3
-Wedge turns of various sizes.
-Introduce side slipping and uphill Christies.
-Develop speed control through turn shape, skidded turns for effective turn shape.
-Build confidence with different sizes and types of turns.
-Guided exploration of easiest beginner terrain.

Level 4
-Beginning to perform a wedge Christy.
-Improve balance on varied terrain and snow conditions.
-Starting to match skis earlier in the turn.
-Getting comfortable with gliding at slightly higher speeds or steeper slopes.
-Learn to use a hockey stop to stop quickly.
Visual Cues to Inefficient Body Movements

All skiers may at times experience these inefficient body movements, but consistent use of the inefficient body movements in a participant should be addressed.

**Balance is not maintained over the whole foot and flow over terrain is lacking.**
The knees and hips flex without ankle flex. The hips are continuously behind the feet. The ankles are over-flexed with the mass continuously in front of the feet. The legs are continuously flexed with no lengthening of the legs during turns. Extension is primarily vertical, leading the late edge engagement.

**The skis’ edges are not engaged and released efficiently.**
The upper body tips to engage the edges. Edging is primarily from the knee without involving the whole leg. Edges are released with a vertical movement instead of a lateral movement. The edge is released with a continuous lifting of the downhill ski. The hips are too far inside a turn too soon, causing a lack of progressive edging movements because the skier is over-committed early in a turn. The edge set interrupts the gliding and guiding of the skis.

**Balance is not directed over the outside ski.**
The inside ski bends as much or more than the outside ski in a turn. The inside hand is continuously lower than the outside hand in a turn. The inside hand is back. The outside ski runs straighter than inside ski, the outside ski does not "come around." The shoulders are always tipped in and never level out relative to the horizon.

**The legs are not moving under the body to guide the skis through a turn.**
The shoulders and torso initiate turning of the skis. The hips initiate turning of the skis. The outside hand crosses the body. Pivoting of the skis is uncontrolled.

**Balance is not being directed throughout the turn.**
The pole swing is late, non-existent, or erratic. The body does not flow down the hill but continuously hangs back or clings to the hill and the previous turn. The hands are low or behind the shoulders. The line of vision is downward and/or not in the desired direction of travel. The pole touch/plant interferes with the desired turning actions.