The slider concept was developed from a standard walker mounted on skis. The walker provides great stability for individuals who have challenges standing up due to balance, strength or endurance. Slider users may also be 3-track/4-track, bi/mono, or dual ski candidates. Often times the slider will serve as an entry-level apparatus to stand-up skiing. It can also be used as a physical therapy modality for sit-skiers.

**Types of disabilities common to students using the Slider:**

As in other adaptive skiing classifications, this category includes a varied and vast population. Some examples of disabilities included in the slider classification are:

- Amputation
- Balance impairments
- Cancer
- Cerebral Palsy (CP)
- Cerebrovascular Accident (CVA/stroke)
- Congenital anomalies of hip/leg/foot
- Epilepsy
- Limb Deficiency
- Multiple Sclerosis (MS)
- Muscular Dystrophy (MD)
- Paralysis & Paresis
- Polio
- Post Polio Syndrome
- Spina Bifida
- Spinal Cord Injury
- Traumatic Brain Injury (TBI)

Virtually any standing student with a diminished capacity for balance, strength, cognitive understanding, or even psychological fear may possibly benefit from the stabilizing ability of the slider.
Evaluation of Student
A complete and detailed student analysis is needed to determine if the student will ski with a slider. A primary concern with these disabilities is the physical assessment (range of motion; strength of limbs; balance; ability to rotate legs; amount of ankle flexion, ability to stand for a reasonable time). A review of current medications and/or other disability involvements should be discussed during this evaluation. The evaluation indicates the equipment needed to create a successful learning environment. Even after this evaluation is completed, adjustments may need to be made, due to student’s abilities demonstrated during the lesson.

In addition to the physical analysis, a personal evaluation should also take place to determine other activities, likes, dislikes, motivation, goals and fears. This provides a platform from which to design the lesson plan. Determination of learning preference is ongoing throughout the assessment process and during the lesson. The student's learning preference can be matched with a complementary teaching style and an acceptable pace, which is based upon the physical analysis and personal interview.

Finally, it is very important that this group of skiers develop sound fundamentals skills. The lesson plan follows the ATS skill development progression with obvious modifications to accommodate physical limitations. The focus is the development of the four skills, regardless of where the movements originate.

Equipment and Set Up:
Take time to initially set up and evaluate a student to determine how to set up the slider. Do not rush the set up for the first time skier! Proper time spent during the initial set up will equal success and enjoyment for the student in the long term.

The slider provides assistance with balance and stability. Many adjustments to the slider such as height, width, arm position, etc, can augment the functional stance of the skier. Consideration should be made for tip and heel stabilization with the use of ski bras, spacer bar, pipes, edgie wedgies, etc. Additional considerations should be given to the height of the slider for tall or top-heavy participants. It is much easier for both the skier and the instructor tethering the skier if the skier is stacked and balanced side-to-side.

Both the tipping angle and wedge angle on the slider skis are adjustable. For safety, both of these should not be set to their maximum at the same time – the slider turns too rapidly and tipping may be a problem.

The slider can be controlled by the user or with the reins controlled by the instructor. A slider is tethered as the skier may not be able to stop the slider by herself, particularly if a sudden stop is required. Note that a slider can slide downhill by itself or with a participant. Park the slider on its side or anchor it to something stationary.
**Tethering a Slider:**

When tethering a slider, the instructor’s goal is to provide safe, smooth assistance as needed for speed control, turn initiation and stops and obstacle avoidance. Since tethering procedures can vary, it is important that you understand and adhere to the tethering safety protocols of your local program/resort.

**Freedom Factory Slider**

![D-rings at crossbar]

**Attaching the tethers to the slider**

The tether(s) should be attached to the D-rings in front and at the crossbar of the slider. This provides the maximum resistance to tipping, reasonable turning control, and the most reassurance for the skier. The slider can be tethered with a single, loop tether attached at the two D-rings or with two single tethers each attached at one of the D-rings.

**Attaching the tethers to the instructor**

There are several key points to remember when attaching the tether to your self:

- **Never ever drop the tether!** Remember that you are the braking system for the slider.
- Use a girth hitch to attach the tethers to your wrists, not your gloves.
- Do not attach the tethers to your upper arms; doing so risks injury to your rotator cuff.
- Use a back-up safety attachment when required by your local program/resort. One end is fastened to the tether and the other to your wrist, arm or waist. A carabiner is often used for this attachment.
**Tethering technique**

The instructor should be positioned uphill and slightly behind the skier and slider. Tethering a slider is similar to tethering a bi-ski or stand-up skier. The key difference results from the slider not inclining or angulating to resist centrifugal forces. When tethering a slider, it is good practice to maintain tension on the tether on the inside of the turn until the skier has passed the point of high centrifugal force.

Consider any pressure of the tether on the participant’s outside leg; it can be irritating or provide reassurance.

**Tether handling**

There are several different techniques that can be employed to initiate turns, including pulling the tether, wrapping the tether in or rotating the tether like a steering wheel. Regardless of what technique you use, practice is critical so that you can develop a feel for what is most effective.

Smooth tether handling is critical for your student’s safety and skiing ability. You should be able to release and gather the tether with ease; there should never be so much slack that you risk tripping over the tethers.

The tightness of the tether lines can vary based on the needs of the student. In general, more advanced students benefit from light guiding of the tether lines, used as ‘teaching tethers’, not a control device. Beginning students, on the other hand, may need the greater instructor control that is available with tighter tether lines.

**Tethering exercises**

- At home watching TV, attach tether lines to a chair and practice wrapping and unwrapping lines; this will aid in slack control. Tether handling, slack control, release and gather the tether – make sure you don’t have slack to trip over.
- Ski in pairs - synchronized skiing, one skier tethered (student), one skier (instructor) in control providing assistance with the tethers.
- Feel how different techniques affect the student – full control vs. gentle guiding.
- Compare and contrast.
- Switch student and instructor. Continue with practice exercises.
- Develop strong skiing skills for safe tethering.
Lift Loading Procedures

The safety of the participant, the instructor, the lift operator and the general public should be considered when selecting a lift-loading procedure. The slider may need to be sent up the lift ahead or behind the participant and instructors. It is best to use a triple or quad chairlift with a slow down to enable the participant to load the chair with the assistance of 2 instructors (one on each side). The instructors will assist the participant on and off the chairlift without the slider.

An alternative method for a quad chairlift is to load the slider directly in front of an adult participant on the same chair. The slider is available to the participant on the way to the loading point and away from the unloading point, except when the slider must be maneuvered around or over gates. With some students, it is possible to load a slider onto the chairlift with one instructor. With children, it may be advisable to load the slider separately on the same or a different chair, as the slider may not fit in front of the student and the student may need additional assistance to get on the chair. Make a plan for what will work with each student and lift.
Adaptive Slider Progression
The following is based on the PSIA Alpine National Standards and has been adapted for teaching with a Slider. Note: Terrain selection is crucial to the success of the participant, due to the rigid nature of the slider’s legs and their width. Steeper pitches may be unsafe.

Beginner / Novice Zone Objectives
Level 1: Welcome to Skiing / Build the Foundation
- Student assessment
- Medical history
- Equipment selection, introduction and set up
- Static balance exercises, indoors
- Student/instructor communication, safety and emergency stop

Level 2: Introduction to Flats
- Pushing, turning, pivoting on flats
- Static balance exercises, outdoors on flats
- Falling and getting up
- Straight runs
- Slider and body position while moving
- Stopping and slowing

Level 3: Introduction to Turning
- Turning left & right through balance and edge control movements
- Vary turn shape and size
- Speed control
- Turning to a stop
- Fan progression
- Linked turns
- Master beginner area
- Introduction to Chairlift and Green Terrain
- Chairlift loading and unloading procedures
- Review lift evacuation procedures
- Student-assisted/instructor-assisted chair lift loading and unloading
- Develop greater skill blending

Level 4: Explore the Beginner Mountain Experience
- Vary turn shape and size for terrain and condition
- Explore a variety of snow conditions

Intermediate Zone Objectives
Level 5: Develop and Enhance Intermediate Movement Options
- Refine proper body movement and position
- Develop long- to medium- and medium- to long-radius turns