



Adaptive Certification Guide

Revised 2011

PSIA-NORTHWEST ADAPTIVE CERTIFICATION STANDARDS

Entry Level I & Level II

Table of Contents

Certification Standards

Adaptive Alpine Certified Level I & II Exam Prerequisites.....	3
Technical Application	4
Adaptive Specialty Module Certification Outcomes	4

Certification study materials and work sheets

Common Skills and Movements of Skiing.....	6
Learning Styles.....	9
Teaching Styles.....	10
Teaching Model.....	11
Guest Centered Teaching Model and Work Sheet	12
Maslow's Hierarchy of Needs	13
Movement Analysis	14
Creating a Lesson Plan from Movement Analysis	14
Medical and Assessment General Information.....	15
Practice Scenarios/Extended Study Questions.....	18-22
Alpine Adaptive "Functional Skiing" tasks.....	23-27
Adaptive exam what to expect.....	28
Reference.....	28

Entry Level Adaptive Alpine Certified Level I Exam

Candidate's prerequisites

A Candidate for Adaptive Alpine Level I certification must:

- ❖ Have a current level I or above Alpine Certification
- ❖ Be a PSIA/AASI member in good standing
- ❖ Be an employee/Volunteer of a recognized ski school or Adaptive ski program and have completed a minimum of 10 hours of in house and on hill training, actual on hill adaptive teaching and approved by the program coordinator or program director. .

Exam Format

The Adaptive Alpine Level I is divided into 3 modules –Cognitive/Visual, Bi/Mono (Sit-down disciplines), and 3 track /4 track (Stand up outrigger disabilities). Once the candidate registers for the exam they will receive an open book written test that needs to be turned in the day of the Exam.

Candidates will receive their level I pin upon passing one of the 3 adaptive alpine modules

IMPORTANT NOTE: If an exam candidate has a disability, his/her capability to demonstrate skills and perform tasks will be evaluated relative to the extent/nature of that disability. The instructor is expected to demonstrate the appropriate skill element that equates to an able-bodied skier's demonstration of that specific task or demonstration. The instructor is required to communicate, analyze, direct and lead.

Adaptive Alpine Certified Level II

Candidate's prerequisites and post *requisites*

A Candidate for Adaptive Alpine Level II certification must:

- ❖ Have a current level I or above Alpine Certification
- ❖ Be a PSIA/AASI member in good standing
- ❖ Be an employee/Volunteer of a recognized ski school or Adaptive ski program and have completed a minimum of 10 hours of in house and on hill training, actual on hill adaptive teaching and approved by the program coordinator or program director. .
- ❖ *To complete the full level II certification candidates will be required to pass the level II Alpine Adaptive "Functional Skiing" portion. There is no time limit on passing the level II Alpine Adaptive "Functional Skiing" portion as long as you continue teaching adaptive skiing*

Exam Format

To attain Level II the candidate will need to pass the two adaptive alpine specialty modules that were not acquired during the Level I process. Once all adaptive alpine specialty modules are completed the instructor is awarded the Adaptive Alpine Level II National pin and certificate.

IMPORTANT NOTE: If an exam candidate has a disability, his/her capability to demonstrate skills and perform tasks will be evaluated relative to the extent/nature of that disability. The instructor is expected to demonstrate the appropriate skill element that equates to an able-bodied skier's demonstration of that specific task or demonstration. The instructor is required to communicate, analyze, direct and lead.

TECHNICAL APPLICATION

Terminology: "For levels 1-6 instructor is able to..."

- A. Define and interpret ski terminology as described in the PSIA Alpine Manual.
- B. Apply an understanding of that terminology while analyzing movement patterns.
- C. Describe cognitive, affective and physical development.

Skiing Movements/Skill Development and Skiing Model: "For skiing levels 1-6 the Instructor is able to..."

- A. Identify, describe and relate the common skills and movements of skiing.
- B. Relate the skills/movement pools to skill development.
- C. Discuss similarities and differences in skill usage as the skier progresses from level 1 to 6.
- D. Describe cause and effect relationships of skier movements.
- E. Identify situational variations or stepping stones of skill application.
- F. Apply "The Ski Safety Act" throughout all aspects of skiing.

Movement Analysis: "Through technical discussion of levels 1-6 the instructor is able to..."

- A. Use a Movement analysis system to describe the movement patterns of a skier.
- B. Use that description in order to determine cause and affect relationships.
- C. Prioritize what a student should work on.
- D. Create a progression based on skill development that targets student needs and changes performance.

Biomechanics: "The instructor will be able to..."

- A. Understand basic biomechanics as it relates to the common skills and movements of skiing.

ADAPTIVE SPECIALTY MODULE CERTIFICATION OUTCOMES

ADAPTIVE ALPINE CERTIFIED I&II

ENTRY CRITERIA FOR EXAM:

- * Current member of PSIA-NW
- * Successful Completion of Alpine level I or Level II Alpine Certified
- ❖ *To complete the full level II certification candidates will be required to pass the functional skiing tasks portion. There is no time limit on passing the level II Alpine as long as you continue teaching adaptive skiing. Regardless of passing the Adaptive “Functional Skiing” or the Alpine level II Skiing, you will be required to demonstrate specific Adaptive focused skiing tasks during the on hill portion of the exam*

The Adaptive Specialty Module candidate must competently transfer the technical knowledge of alpine skiing with the appropriate adaptations to elevate clients’ skill, understanding, and enjoyment of the sport. Each adaptive specialty is divided into modules: Bi-ski/Mono-ski, 3 Track/ 4 Track, Visual Impairments/ Cognitive Disabilities. The exam will be scored in three categories Teaching, Technical, and Safety. You must successfully complete one adaptive Specialty Module to become Adaptive Alpine Level I certified.

TEACHING CATAGORY

Knowledge of Teaching: “While teaching levels 1-6 desired specialty the instructor is able to...”

- A. Recall Your Responsibility Code and discuss how to integrate it into lessons.
- B. Understand the Teaching and Skiing Models and discuss how integrate them into a lesson.
- C. Identify the different teaching styles explaining how they relate to learning styles.
- D. Know about Maslow’s Hierarchy of needs and how it applies to a lesson.
- E. Discuss the implications of lateral learning for goal setting and lesson planning.
- F. Identify student needs including...
 1. General principles for specific groups such as adults, kid’s, Learning Disabled, spinal cord injuries
 2. Common developmental patterns

Application of Teaching: “While teaching lessons for levels 1-6 in desired specialty the instructor is able to...”

- A. Demonstrate safety awareness in all decision-making, based on understanding Your Responsibility Code, student profile, disability and changes in the daily conditions.
- B. Communicate information using basic techniques such as verbalization, demonstration, eye contact, voice inflection, body language and pacing.
- C. Modify the lesson based on disability, developmental needs, energy level, lesson content, weather and snow conditions, student learning style, and safety.
- D. Create a learning partnership with students that address their expectations and develop a lesson plan to support the decisions made during movement analysis.

- E. Use lateral learning activities to develop skills and create experiences for the students.
- F. Provide appropriate demonstrations.

TECHNICAL CATEGORY

Terminology: "For levels 1-6 in the desired specialty instructor is able to..."

- A. Define and interpret ski terminology as described in the PSIA Alpine Manual.
- B. Apply an understanding of that terminology while analyzing and teaching.
- C. Define disabilities and associated medications common to each specialty.
- D. Relate disability and medication effects to skiing and the elements.
- E. Describe cognitive, affective and physical development.

Equipment: "For desired specialty the instructor is able to..."

- A. Identify, define and explain adaptive equipment and its influence on skiing.
- B. Perform a physical and cognitive evaluation of the student to define equipment needs, safety precautions and teaching strategies.
- C. Identify changing equipment needs as students move from level 1 to 6.

Skiing Movements and Skill Development: "For skiing levels 1-6 in the desired specialty the instructor is able to..."

- A. Identify, describe and relate the common skills and movements of skiing.
- B. Relate the common skills and movements skiing skill development.
- C. Discuss similarities and differences in skill usage as the skier progresses from level 1 to 6.
- D. Relate how the disability and medications impact skiing performance.
- E. Demonstrate safe and appropriate loads, unloads, assists and guiding techniques.
- F. Describe cause and effect relationships of skier movements.
- G. Identify situational variations or stepping stones of skill application.

Movement Analysis: "While teaching levels 1-6 in desired specialty the instructor is able to..."

- A. Use a Movement analysis system to describe the movement patterns of a skier.
- B. Use that description in order to determine cause and affect relationships.
- C. Prioritize what a student should work on.
- D. Create a progression based on skill development that targets student needs and changes performance.

COMMON SKILL AND MOVEMENTS OF SKIING

The fundamental skiing skills, balance, rotary, edging and pressure, are the framework used to evaluate ski technique. While there is no final form that epitomizes a correct application and blending of the skills, the observed skiing outcome (effect) can be traced back to skill application and blend (cause), or the lack thereof. Many different combinations can be used to produce similar outcomes. By exploring at each level the many possibilities for deriving a desired response the skier becomes more versatile. This

process is called lateral learning. To do this one must identify the body movements that produced the observed outcome.

These basic movements are designed to help accelerate the learning curve for your guest. We have transformed the Skills Concept (balance, rotary, edge and pressure) into a movement-based approach. These fundamental movements can be used as a progression for first time skiers, to identify issues in advanced skiers, or in any sequence that best meets the needs of each guest. We feel some of the key components to accelerating the learning curve are to make our coaching simple, fun, and relevant to each individual.

BALANCE

Like the foundation of a house, balance is our foundation for building skiing skills. It is a prerequisite to applying other skills:

- ❖ A coordinated flexion of ankles, knees, hips, spine, centers skier over the whole foot. Subtle extension may be used to re-center skier in a neutral stance in preparation for new turn particularly in lower level skiing maneuvers.
- ❖ The back is slightly rounded, arms naturally spread, hands at least as wide as elbows, and elbows forward of spine. Coordinated movements of the hands, arms, elbows, and shoulder joints aid in centering the skier over the whole foot.
- ❖ Pole, hand, and arm movements aid balance by complimenting and enhancing flow of motion.
- ❖ Balance will move from foot-to-foot due to turn dynamics and /or skier movements.

Movement Cues:

- ❖ Arms are open to the torso and moving ahead of the hips.
- ❖ Hand and arm movements constantly adjust upper body balance.
- ❖ Swinging both poles and touching them helps direct and balance the torso over an active lower body.
- ❖ Stance width is naturally open; not “set”
- ❖ Weight distribution on each foot is natural and not “predetermined”

FLEXING & EXTENDING MOVEMENTS = Balance & Pressure Control

The ability to manage pressure, and apply additional movement pools, is the result of being balanced in the center of the skis.

- ❖ Coordinated flexing and extending of ankles, knees, hips and spine maintains fore-aft balance and allows pressure management and terrain absorption.

Movement cues:

A very slight flexing of joints that originates with ankles softening to balance your body weight on the whole foot and in the center of the skis. Ankles, knees, hips, and spine flex and extend in harmony with each other. It is important to notice if some joints are flexed more than others and how it affects the skier's ability to balance. (See Stick Figure diagrams for details on flex differentials p. 15)

- ❖ Explore feeling the range of motion in ankles to find center.
- ❖ Extending forward in the direction of your momentum helps you move into the next turn.

TIPPING THE FEET and LEGS = Edging Skills

- ❖ Tipping movements originate in the feet, ankles and lower legs continuing up through knees and hips as necessary to control edge angle.
- ❖ Edge change (releasing and re-engaging) occurs through tipping movements versus a pushing behavior.

Movement cues:

Both ankles, legs work in unison. Hips may counter to allow femur to top without over rotation.

Releasing movements may be accomplished through relaxing or extending to neutralize body angles.

Warm up drill: explore rolling feet, ankles and legs from side to side while standing on a flat surface.

- ❖ Explore tipping the feet and legs into the turn, and out of the turn.
- ❖ Try to flex ankles, and then roll ankles to tip the skis on edge.
- ❖ Shortening the inside leg helps initiate the tipping action of feet, ankles, and legs.
- ❖ Feel the edge under the arch, and use the edge to draw a half circle in the snow.

TURNING THE FEET AND LEGS = Rotary Skills

- ❖ Active muscular steering input supplements ski design as necessary to control turn shape.
- ❖ Skis are guided primarily by active steering of both feet and legs with turning power coming from muscles in the thigh area.
- ❖ Femurs rotate in the hip sockets beneath a stable pelvis and upper body.

Movement cues:

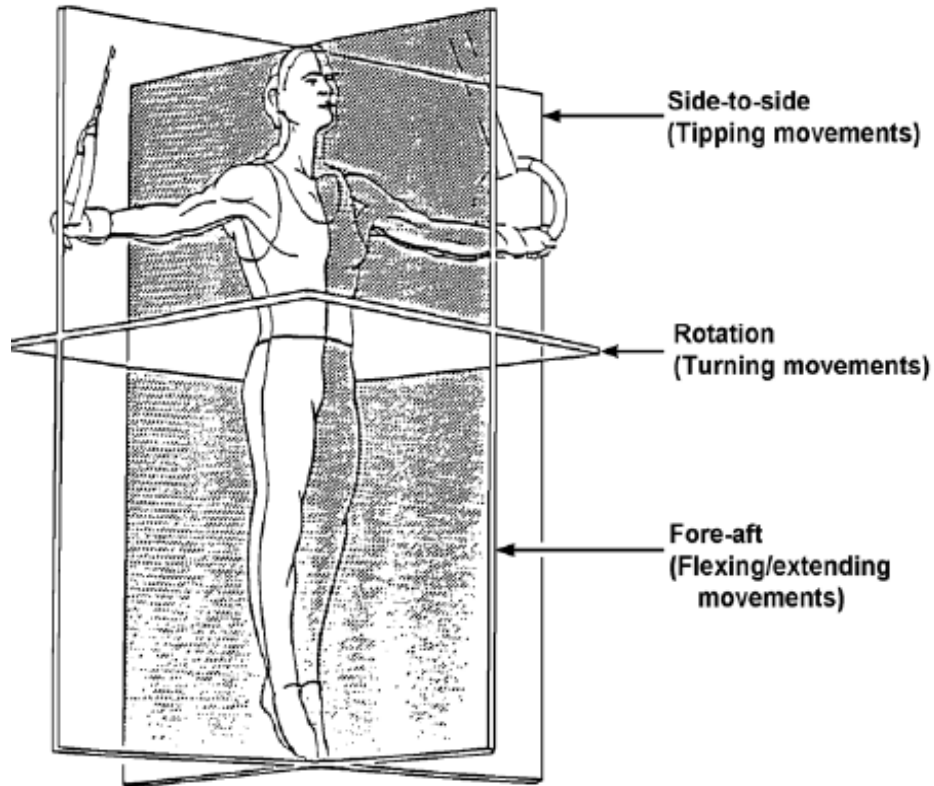
Turn feet, ankles, and legs under the torso, with hands and arms stabilizing torso.

- ❖ Steer inside leg to enhance symmetry in parallel turns.
- ❖ The strongest turning power comes from the muscles in the hip and thigh areas.
- ❖ Countering may result from the rotation of both femurs in the hip sockets.
- ❖ Feel the edge under the arch, and use the edge to draw a half circle in the snow.
- ❖ Leg turning may be used to guide edged and pressured skis, or pivot flat or unweighted skis.

Tactics

- ❖ Speed is controlled primarily through deliberate choice of the line (i.e. turn shape), and only secondarily by using skis as brakes when necessary. **Good tactics include strong safety consciousness, terrain selection and attention to others on the slopes, especially for maneuvers that involve travel across the slope.**

3 RANGES OF MOTION



LEARNING STYLES

Being able to identify learning styles helps the instructor form a learning partnership with students. The partnership is built through interaction with the student to develop knowledge of his unique wants, needs and personality. This is the key to a successful lesson. Identification of a dominant learning style will help the instructor develop a lesson plan that incorporates multiple teaching styles. BUT do not feel that you have to teach only to that one learning style. People learn through a wide range of visual, auditory and kinesthetic experiences, so try to address each learning style at some time during the lesson. Realize that you teach to your dominant learning style since we gravitate to the things we know best. Always remember to provide lessons that are well rounded, versatile and student-centered.

VISUAL LEARNERS: These people learn best by watching and imitating.

- Ski clean demonstrations that are truly illustrating your point.
- Over-exaggeration can destroy the picture.
- Target the students' attention towards a specific area, i.e. what part of the body or turn.
- Some students visualize the whole picture, some specific parts. Change focus if needed.
- Let the student view from different angles; i.e. front, side, back, coming, going...
- Use video if available. Guide the students for a positive viewing experience.

AUDITORY/COGNITIVE LEARNERS: These people need to verbalize and understand skiing.

- Give clear, concise descriptions using words/descriptions familiar to the student.

- Be precise and to the point. Long, drawn-out explanations are not necessary.
- Paint a picture using words, metaphors, and similes. "It is like a bird walking on eggshells"
- Give a rationale, a WHY, with your descriptions.
- Involve the student. Have them be a part of a verbal exchange, not a monologue from you.

KINESTHETIC/PROPRIOCEPTIVE LEARNERS: ** These learners need to feel their skiing.

- Check your student's equipment...they might not be able to feel things in ill-fitting boots.
- Ask students what they are feeling and go from there.
- Be sure to show and describe what to feel for...integrate the other learning styles.
- If you need to touch the students to position them, ask permission first.
- Groomed terrain and slower speeds are essential for feelers during initial learning.

**Kinesthetic refers to things that act outside the body to create feeling, such as the pressure on the leg from the boot. Proprioceptive refers to feelings within the body, such as tightening or stretching different muscle groups to achieve an end result.

TEACHING STYLES

COMMAND: The teacher controls the all action. Teacher is center of attention; making all the decisions and telling students if they are right or wrong. Example: The teacher sets up a situation for the students to learn a wedge stop. He/she calls down students one at a time and gives them feedback on their performance.

TASK: The teacher outlines the parameters of a task. He explains and demonstrates the task and sets the practice boundaries. Students are free to execute and practice the task within the given boundaries. The teacher may move about and give feedback or ask for variations of the task depending on individual needs.

Example: The teacher shows a wedge christie. He explains the movements necessary to match the skis. Appropriate terrain is selected and the practice area outlined. Students practice while the teacher gives feedback.

RECIPROCAL: Pairs or groups are established. The roles of "doer" and "watcher" are clearly defined. Task is explained and demonstrated. Practice boundaries, time frame and evaluation criteria are explained by the teacher. Students perform and evaluate each other doing the task. Teacher is free to watch and give feedback.

Example: Teacher asks "doer" to ski wedge christie turns to a designated stopping point. "Watcher" follows and gives "doer" a description of where in the turn the "doer" matched his skis.

GUIDED DISCOVERY: A series of questions or experiences to guide the students to a specific answer. Each step builds upon the previous step/answer. The teacher leads the group to make the discovery of a specific outcome.

Example: Students on the beginner hill are shown how to sideslip. With practice, they learn to release their edges. The teacher asks a series of questions about the task. "What do you do with your knees to release the edges?" "Can any other part of your body help you release the edges?" "Try your ankles, hips, upper body...Can those move to release your edges?" Students discover how to move their ankles, knees and hips to release their edges for side slipping.

PROBLEM SOLVING: A problem is posed to the students. The teacher sets a framework, time limit and work area for finding the answer. Working independently or as a team, students find answers to the problem. There may be more than one solution and the teacher accepts all.

Example: Teacher wants the students to learn the perceptual skill of picking the easiest path down a bumpy blue slope. Students must decide which side of the run to ski, where to turn and how big a turn radius to ski and what speed to ski. Some students ski the middle, some the left or right side. Some make big turns, some use a traverse, some make little turns. Some students ski a path around the bumps, some ski from the top of one bump to the top of the next. At the end of the run the teacher has the students share their choice and explain why they thought it was the easiest approach. The teacher must acknowledge every student's solution and provide insight to the other students. This follow-up session is essential to anchor the activity and provide alternatives.

TEACHING MODEL

INTRODUCE THE LEARNING SEGMENT:

Establish rapport, creating a fun, open learning environment. Outline the given segment, whether it is the day or one section of learning, defining the general process and outcomes.

ASSESS THE STUDENT:

Ask a wide range of questions for an initial verbal assessment. Ascertain the students' previous experience with skiing and other related sports. Determine students' goals, experiences, physical and medical needs, and adaptive equipment requirements. Determine what type of learner the student is whether he is process or outcome oriented and his preferred type of feedback. Watch him ski while performing a movement analysis. Assess the skiing to see if the current ability matches expressed goals and expectations. This segment gets to the root of motivational needs, understanding needs and movement needs in the student.

DETERMINE GOALS AND PLAN OBJECTIVES:

Set goals based on on and off snow movement analysis and the students' expectations. Compromise if the students' expectations are too high for their current ability. Formulate a logical progression to address the goal. Clearly state the goal to the student and briefly outline some of the steps they will experience. Choose appropriate terrain and conditions for lesson activities.

PRESENT AND SHARE INFORMATION:

Present the lesson using a variety of teaching styles suitable to each situation. Target different learning styles so the students will get the maximum benefit. Pace information sharing, practice time, feedback, reinforcement and ski time to keep the lesson fun and the students motivated. Address student orientation to process or outcome as determined during the assessment.

GUIDE PRACTICE:

Set practice tasks to the level of the students. Provide specific feedback to each individual. Guide initial practice and set students up for meaningful independent practice, using appropriate guiding and tethering techniques. Provide appropriate reinforcement. Use a variety of approaches to practice with both outcome and process oriented activities.

CHECK FOR UNDERSTANDING:

Verify physical understanding by comparing their performance to the lesson objectives. Ask questions, when possible, to make sure students cognitively understand the lesson objectives. Check for understanding often, looping back through the lesson if students have not retained the behaviors and cognitive understanding outlined in the lesson objectives.

SUMMARIZE THE LEARNING SEGMENT:

Review the lesson goals and communicate the degree of accomplishment to the student. Preview the next lesson and encourage further development. Establish independent practice guidelines.

***For more information about the Teaching Model, please refer to: "PSIA Alpine Manual" *** Another system similar to the Teaching Model is the Guest Centered Teaching Model

GUEST CENTERED TEACHING INTRODUCTION

Guest centered skiing and snowboarding lessons are simply, positive skiing and riding experiences! By understanding the basic needs of people and fulfilling their needs you can create the most positive learning experiences possible.

Most successful instructors have something in common: they consistently exceeded their guest's expectations! This is due to the fact that they pay much closer attention to all guest needs, both spoken and unspoken. When connecting with your guest keep in mind that 70% of our communication is non-verbal. Look and listen to cues as you formulate a plan for each individual.

The only desire an instructor can have, in order to access all of the guests needs, is the desire to do what the guests really want. The intrusion of any of the instructor's personal desires will minimize the capacity to meet guest needs!

Our Guests bring a variety of needs with them to a lesson. They may need to stay warm and safe, know about pole use, look good, not work so hard or keep up with a friend or loved one. All of the needs people bring fall into one of these three categories:

- Motivational Needs
- Understanding Needs
- Movement Needs

Motivational needs are the most powerful needs in determining a positive guest experience.

Motivational needs are the most challenging needs for an instructor to meet. Perhaps this is because of the intensely personal nature of this motivation. While there are times when motivational needs are the same as movement and understanding needs; they may also be the underlying reason for the movement and understanding needs. Occasionally motivational needs have nothing to do with the movement and understanding needs. Perhaps a guest merely desires company or an orientation to a part of the mountain they have not skied before.

Understanding needs are a category of needs that includes a guest's awareness and understanding of their current ability or inability. Working in this category offers the instructor an opportunity to clear up misunderstandings as well as relate what the guest is learning to other needs they may have.

Realizations, awareness, discoveries and summaries are all valuable elements toward meeting their understanding needs.

Movement needs are the technical understanding which greatly affects your ability to be successful in assessing what will help your guest the most. Movement needs are also greatly impacted by your guest's equipment and any cause and effect relationships affecting the skier's stance or alignment. While most guests who take skiing or snowboarding lessons may describe a movement needs as their

reason for taking a lesson, remember that movement needs are generally only on the surface of deeper understanding and motivational needs.

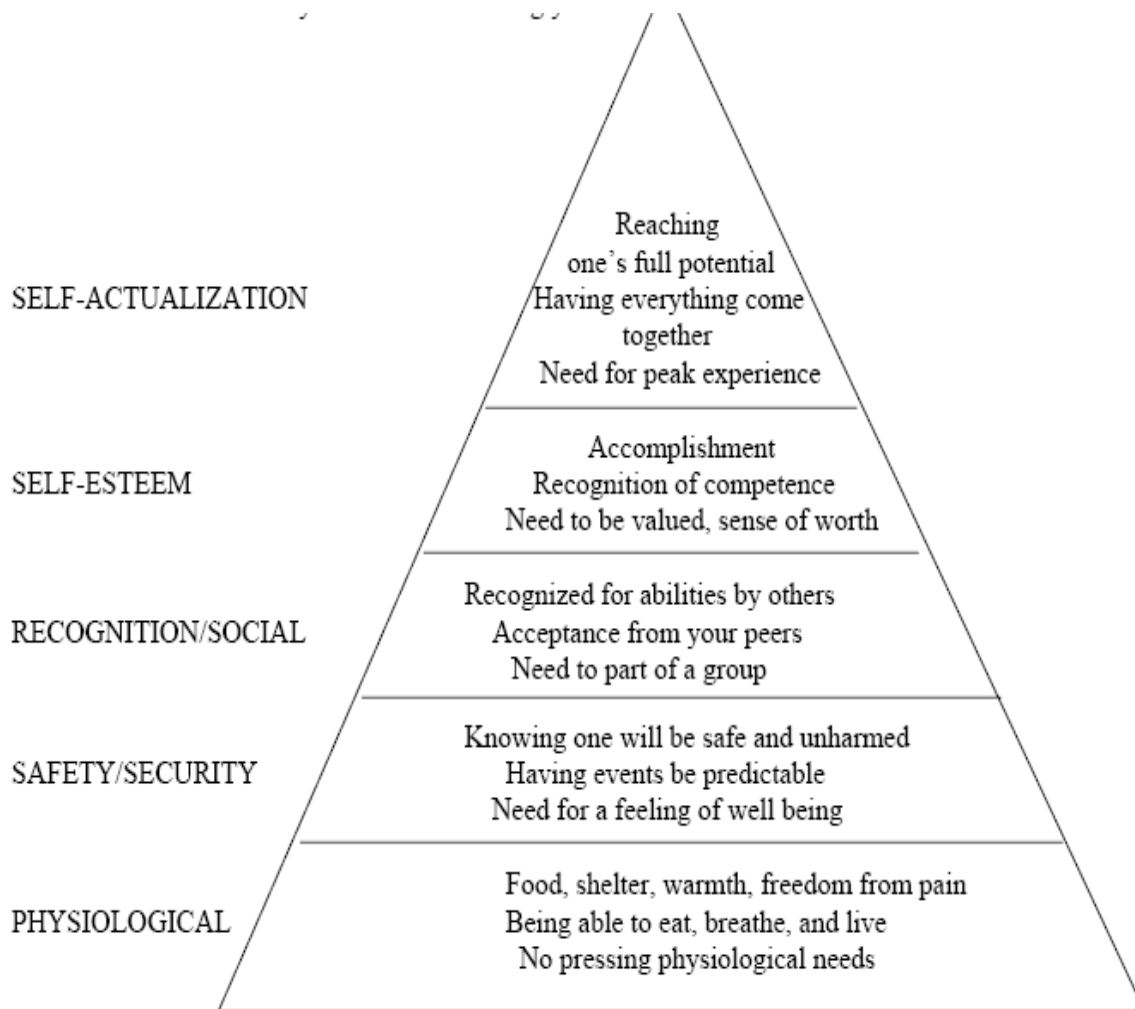
INSTRUCTOR BEHAVIOR:

Identification activities help us determine the needs of our guests. The foundation of a positive skiing/snowboarding experience rests on our ability to accurately identify our guests' motivational, understanding and movement needs. We can identify these needs by asking questions, making observations, verifying any assumptions. Through this process we can then assign meaning to those observations.

Facilitation activities are your lesson planning activities which include anything we do or say in response to an identified need. They can be as simple as answering a question, going in to warm up, explaining a new task or just plain skiing or riding a lot! What's most important for your guest determines the activities we choose to make our teaching relevant to the needs of each guest!

Maslow's Hierarchy of Needs

Abraham Maslow believes that in order to develop in any domain, cognitive, affective or psychomotor, certain basic needs must be met so one has energy available to grow. He visualized this idea as a pyramid with the most pressing needs on the bottom creating a base for the next level. Each subsequent level builds on the previous one so if a lower level is weak the whole structure collapses. This is very important when teaching skiing because a student who is cold or hungry, at the base of the pyramid, is not going to be interested in learning. A student who is totally overwhelmed by the skiing environment and does not have a sense of control over what is going on, lacking elements from the safety /security level, will have trouble focusing on new skills. An instructor needs to be aware of this



For more information about Maslow's Hierarchy of Needs, please refer to "PSIA Core Concepts for Snowsport Instructors © 2001"

MOVEMENT ANALYSIS

For the exam the candidates will be shown a video of different skiers. Through technical discussion of levels 1-6 the instructor is able to write down on a work sheet and discuss.....

OBSERVATION AND DESCRIPTION:

1. Determine student profile: diagnosis, ability, equipment, expectations for lesson etc.
2. Set up your observations by choosing a task within the ability of the student. Demonstrate and then have the student perform the task.
3. Observe student performing the task. Describe the student's behaviors and movement patterns in non-judgmental, positive terms.
4. Relate mechanics to skill blend and/or movement pools.

5. How was the turn started, shaped and finished? Did this effect skill blend or turn shape?
6. Make as complete a description as possible. The more complete the picture the easier it will be to determine cause and effect relationships.

CAUSE AND EFFECT RELATIONSHIPS:

1. Most of the time one sees the effect. Look for the cause, why it is happening.
2. If there is a problem, specify where in the turn it occurs. Things that happen in one part of the turn affect other parts of the turn.
3. If there is not a problem specify how the student's movement allows for effective skiing.

PRESCRIPTION FOR CHANGE:

1. Target the fundamental movement (i.e. cause) that is to be changed.
2. Prioritize what should be done 1st, 2nd, and 3rd, in order to achieve the specific outcome.
3. Determine whether the activities will encompass the "whole" picture or be broken down into smaller steps.
4. State the goal and explain why you have chosen a particular focus.

LESSON PLAN:

1. Create a lesson plan based on the needs of the student.
2. Make sure the goal/skill focus is relevant and activities address that goal/skill.
3. Pace the information to allow for comprehension and plenty of practice time.
4. Loop back through the goal setting stage if the expected results are not forthcoming.
5. Keep students involved.

CREATING A LESSON PLAN FROM MOVEMENT ANALYSIS

Student Profile: "This skier is..."

What level skier? Comfortable? Aggressive? Intimidated?

What type of turn? Open parallel? Wedge Christie?

Description of Mechanics: "I see this skier doing..."

- What does the skier do to start the turn?
-rotation -counter rotation -fulcrum -push off -heel thrust -combination
- How does the skier control and finish his turn?
-leg rotation -steering -counter rotation -rotation -angulation -combination

Cause and Effect Relationships: "Because of _____, the result is..."

Based on your observations of mechanics, what are the results?

- -turn shape -skill blend -balance
- -linkage -control -combination

Prioritize: "I would work on _____, because...."

- Set one goal. What is most important?
- Provide a rationale for your decision. Why?

Lesson Plan: "Some of the activities I would do with this person are..."

- Make sure the activities reflect your goal

- Combine activities of like mechanics
- Explain your exercises and their focus. One exercise can be used many ways.
- Activities don't need to be linked exercises...what focus could you give the student? How and where might you ski them?
- What is the end result, or outcome of your lesson plan?

LATERAL LEARNING

Lateral learning refers to expanding and strengthening one's ability in a particular area before beginning on a new concept. In ski teaching this means working with a student within an ability level rather than focusing on a strictly linear progression to the next level. By developing a solid movement base in a variety of snow and terrain conditions, the student progresses to the next level with ownership of their movement patterns.

Practice designing progressions to enhance lateral learning by taking one movement and creating progressions which varies the movement focus, yet still develops the same movement.

MEDICAL AND ASSESSMENT GENERAL INFORMATION

Medical Information: Diagnosis and medication can affect the cognitive (how a person thinks and communicates), affective (beliefs, behavior) and psychomotor (how a person balances and moves) aspects of a student. The instructor needs to know the basic signs and symptoms of each diagnosis is listed below are some brief definitions of medications and classifications of disabilities. This is NOT an exhaustive list. Please refer to PSIA Adaptive Manual, Bold Tracks, 3rd edition and the Adaptive Educational Manual for further information.

Medications: Always check to see what medication(s) the student is taking. Knowing the general classification to which the medication belongs and knowing why the medication is being taken is the first step in identification. Then one must discover the side effects and how that medication and/or condition for which it is being taken will affect the student on the hill. While some of the common medications, as listed below and in Bold Tracks, 3rd edition will be recognized others will not. Neither list is exhaustive, and new medications are prescribed every year. If a medication is not recognized consult the Physician's Desk Reference (PDR) or the Internet. The information is essential before going out on the hill. This is not an exhaustive list but a suggestion.

Analgesic – relieves pain and discomfort. Can be aspirin like (Naproxyn) or an opioid (Percocet)

Antiarrhythmia – helps regulate heartbeat. Digoxin, Lanoxin

Antibiotic/Anti-infective (antibacterials fall into this category) -treats infection. Ampicillin, Macrodantin, erythromycin

Anticholinergic - relieves bladder spasms. Ditropan, Di-Spaz

Anticoagulants

Beta-Blocker and Calcium Channel Blocker -treat angina and hypertension. Procardia, Verapamil

Bronchodilator – relieves broncho-constriction. Proventil, Atrovent, Seravent

Carbonic Anhydrase Inhibitor (antiglaucoma agent) - regulate eye pressure. Pilocarpine, Timolol

Cardiac glycoside - affects the heart rate, rhythm and contractile force. Digoxin, Lanoxin
Insulin/Antidiabetic -controls diabetes. Humalin, Glucotrol, metformin

Disability Related Complications/Concerns: Each specific disability has certain complications and/or safety needs associated with it. Some, such as spinal stabilizers or shunts will be uncovered during the assessment. Activity and the environment may provoke others, such as sugar depletion in a person with diabetics or autonomic dysreflexia. Whatever they are, the instructor must assess and anticipate these situations and know how to deal with them.

Evaluation/Practical Assessment: The written medical history often contains a physical ability evaluation. Using this as a reference, a practical evaluation is done by the instructor. This allows the instructor to get a picture of how the student is functioning at the time of the lesson. Refer to the PSIA Adaptive Manual pgs.27-137, Bold Tracks, 3rd

© Copyright PSIA-Rocky Mountain-AASI 2004 26 of 38

Equipment: Using results from the written evaluation and practical assessment the appropriate equipment is chosen. Equipment needs vary with each disability and individual. Some pieces of equipment are used solely within one specialty while others are used in a multitude of places. Refer to the PSIA Adaptive Manual pgs 27-137 and Bold Tracks 3rd for more complete information.

Assists: Teaching adaptive skiing often requires a more direct, hands-on approach than teaching typical two track skiing. It is common to see an instructor assisting an adaptive skier during the lesson. Assists are teaching tools. It is extremely important to execute these assists in the safest possible manner for the student, the instructor and the rest of the skiing public. No assist should be at a speed greater than that needed for a beginning turn. Speed should be controlled by turn shape, not a wedge on the part of the instructor. Refer to the PSIA Adaptive Manual pgs 27-137 and Bold Tracks 3rd for more complete information.

Teaching Tactics: It is important to tailor teaching style to a student's learning styles. Take the time to discover how a particular student learns. Do not talk down to any student whether they have a physical or cognitive disability. Demonstrate clearly and with the appropriate equipment. This, along with loading and unloading the chairlift with any type of equipment takes practice!!! Practice skiing with/on the various pieces of equipment. Guide with a clear and loud voice, using simple words. Do not try to teach and guide at the same time. Finally, tether in a manner that is safe most of all for the instructor, but also for the student and the skiing public.

DEFINITIONS: This is not an exhaustive list but a suggestion, please review definitions in the RM Adaptive Educational Manual. . Congenital Conditions - A condition that exists at or from birth. It may be hereditary or the result of disease or deficiency during pregnancy

. Diabetes – There are two types.

Insulin dependent diabetes mellitus – also known as IDDM or type I diabetes. In this type the body cannot produce the needed insulin. Non-Insulin dependent diabetes mellitus – also known as NIDDM or type II diabetes. The term adult onset diabetes is no longer being used since more and more children are now acquiring this type of diabetes. In this type of diabetes the body produces the insulin but the cells cannot use it to effectively regulate blood sugar.

. Diplegia – Paralysis of corresponding parts on both sides of the body.

. Field of Vision – The area one can see when the eyes are looking straight ahead.

. Hemipopia – Circumstances where half the field of vision is blocked.

. Hyperglycemia – High blood sugar. Severe hyperglycemia can include diabetic coma.

- . Hypoglycemia – Low blood sugar. Severe hypoglycemia can include insulin shock.
- . Osteosarcoma – Cancer of the bone.
- . Progressive Disabilities - Disabilities with symptoms that progress during the course of a person's life.
- . Quadriplegia/Tetraplegia – Paralysis of all four limbs.

SPECIALTY: Three-Track

AK (Above the Knee amputation) BK (Below the Knee amputation) Spina Bifida Cerebral Vascular Accident (CVA = Stroke) Congenital anomalies of leg/foot Hemipelvectomy Hip Disarticulation Osteosarcoma and other cancers Post Polio Syndrome

SPECIALTY: Four-Track

Arthrogryposis Huntington's Disease Amputations Muscular dystrophy (MD) Brain Injury and other progressive diseases Cancer Plegias Cerebral Palsy (CP) Diplegia, hemiplegia, paraplegia, spastic, athetoid, flaccid, ataxic, rigid quadriplegia Cerebral Vascular Accident (CVA=Stroke) Post Polio Syndrome Congenital anomalies of the leg and/or foot Spinal cord injuries (SCI) Friedreich's Ataxia Spina Bifida Guillain-Barre Syndrome Brain Injury

SPECIALTY: Mono-Ski

Amputation Neuromuscular diseases Brain Trauma Post Polio Cerebral Palsy (CP) Spinal cord injuries (SCI) spastic, athetoid, flaccid, ataxic, rigid Paraplegia, incomplete quadriplegia Muscular dystrophy (MD) and others Multiple Sclerosis (MS) Spina Bifida and other progressive disease

SPECIALTY: Bi-Ski

Balance impairments Multiple Sclerosis (MS) Brain injury and other progressive diseases Cerebral Vascular Accident (stroke) Neuromuscular diseases Cerebral Palsy (CP) Post Polio spastic, athetoid, flaccid, ataxic, rigid Quadruple Amputee Dwarfism Spinal cord injuries (SCI) Epilepsy, severe Paraplegia, quadriplegia and others Mental Retardation Spina Bifida Muscular dystrophy (MD)

SPECIALTY: Visually Impaired/Blind

How the eye works Hemipopia Albinism Legal Blindness Brain injury Macular Degeneration Cataracts Peripheral vision Congenital eye defects Retinal Damage Corneal disease Retinitis pigmentosa Diabetes/Diabetic Retinopathy Strabismus Glaucoma Tunnel Vision

SPECIALTY: Cognitive Related Disabilities

Alzheimer's Developmental Delays Autism Epilepsy ADD/ADHD Fetal Alcohol Syndrome (FAS) Brain Injury Fragile X Syndrome Cerebral Palsy Hemiplegia Spastic, flaccid, rigid, ataxic, athetoid Learning Disabilities Hemiplegia, diplegia, quadriplegia Mental Retardation, Down syndrome

Movement Analysis Sample Exam Form

Student Profile: Include any assumptions made concerning disability. Define equipment used.

Observation and Description: Includes things such as skiing level, type of turn, turn shape, speed control, skills/movements.

Cause and Effect Relationships: _____ is happening because of _____.

Prescription for Change: Include any possible equipment and/or safety considerations?

Lesson Plan: Activities relevant to prescription for change.

PRACTICE EVALUATION SCENARIOS

Student profiles:

A woman in her mid 50's with macular degeneration.

13 year old boy with Down syndrome whose parents want him to "go for it" in Special Olympics but he would rather watch Spiderman cartoons.

A man doing "wheelies" in front of the ski school desk asks to receive a ski lesson.

College coed who had retinal blastoma and is currently taking a semester off from school due to a recurrence of malignant cells. Never skied before, wants to learn.

Teenage girl with full leg metal leg braces on both legs who walks with forearm crutches and uses a wheelchair.

A young boy with spastic quadriplegic CP travels slowly up to the desk to confirm his lesson.

College student who lost his eyesight in a violent car accident two years ago and has not skied since the accident.

Student has a T-5 SCI.

At Christmas, a well known model who has a BK amputation asks for lessons so that she can ski in France after a February fashion show in Paris.

Questions

What are the possible cognitive, affective and physical manifestations associated with the student diagnosis.

How would a cognitive assessment be conducted? Affective assessment? Physical assessment?

Where is the assessment conducted?

What aids does the student use? Why are they used? How will this impact skiing?

What could be going on that is hidden? Medications?

What type of equipment may be used? Is there more than one possibility, and if so how would one determine which to use? Does it always have to remain the same? What factors determine this? What methods can be used to educate/convince a student to change equipment?

Who uses guiding systems? What type of guiding system might be used? Define the system.

What are the safety concerns with this student?

Explore learning styles the student may prefer. Discuss teaching styles that support the learning preference.

Think of the Teaching Model. Can it be used as is or will accommodations need to be made?

EXTENDED STUDY QUESTIONS

These study questions are designed to make you think, pursue answers, discuss issues with trainers and friends as you broaden your knowledge of adaptive skiing. To get the most from this section write answers out before talking to others. Unless specified otherwise, every question should be answered for each specialty.

I. EQUIPMENT

List the different makes of mono and bi-skis. Describe their parts with associated functions.

Discuss the advantages/disadvantages of the different makes of mono and bi-skis.

Describe how to fit a skier into the seat of a bi or mono-ski.

How is a dowel test performed? What is its purpose? As a result is weight ever added to a sit-down ski? When? Where? Why?

Measure outriggers for a mono-skier, bi-skier, 3-tracker, 4-tracker, including hand-held and fixed riggers for the bi-ski. What is the function(s) of outriggers for each of these skiers?

List other equipment a 3-T or 4-T skier may use including of ski and boot types; appliances for obtaining a flat ski, fore/aft balance, equalizing fore/aft pressure, and lateral control.

What other equipment may the instructor use to help with a 4-T lesson? Why?

Describe different types of hip/leg/back braces worn by 4-trackers. How do these devices work? What is done with the braces during a lesson? What is their impact on the skier?

Discuss methods to retain and/or pad the residual limb of a 3-tracker.

What equipment may a student with a visually or cognitively challenge use? Why?

Discuss different types of communication equipment a blind or low vision skier and guide may use.

List physical aids that may be used by an instructor of students with visual or cognitively challenges. Why might these aids be used?

List, from head to toe, clothing and accessories that may be used by students with visual or cognitively challenges?

II. SAFETY

Discuss safety issues connected with outrigger use. Consider hand held and fixed, stand-up and sit-down outriggers.

Discuss the challenges to both the instructor and student when physical assists are used. This includes loads, unloads, helping the student up after a fall, as well as skiing assists.

Investigate how to help a student transfer a student to and from mono and bi-skis? and in and out of bindings.

Discuss the challenges to both the instructor and student when working on crowded slopes, hard or icy conditions or amid active snow guns.

What can an instructor do to prevent being separated from students with visual or cognitively challenges?

What should an instructor do if separated from their student with visual or cognitively challenges?

III. TEACHING AND TECHNICAL

List several reasons for teaching a straight run. (even in a bi-ski) This emphasizes which skill?

What role do outriggers play in a straight run? In beginning turns? Where are they positioned?

What skill(s) are emphasized in making a beginning turn? What body mechanics are used to develop this skill? What is/are the ski(s) doing at the beginning phase of the turn?

Answer question 3 for wedge turns, wedge christie and open parallel.

Cite the skills hierarchy. How do the skills interact?

How do the skills and the movement pools relate to each other?

What is the purpose of a sliding rigger touch? What body movements create this action?

Describe the differences/similarities between teaching with fixed and hand –held riggers.

Describe the positioning of a skier in the seat of a sit down device. What advantages/disadvantages does this give?

Describe the placement of a residual limb while skiing. Why is the placement important? What can happen if the limb is in the improper alignment?

Where do rotary forces originate with a 4-track skier? Is it the same for all 4-track skiers?

What are the similarities/differences between teaching any specialty and 2-track skiing?

What determines whether a turn will be skidded or carved, especially in a bi-ski?

What adaptations of the able-bodied skiing model are used with the different specialties?

What are the common learning styles for students with visual or cognitively challenges to learning?
What type of teaching styles work with these learning styles?

Describe the different communication styles an instructor may employ. (especially with a cognitively impaired student) What are the advantages/disadvantages of each?

What type of behavior challenges might be found in cognitive challenges? What methods can the instructor use to deal with these behaviors effectively?

Define the differences between cognitive, psychological and psychomotor functions of the body.

What purpose does dragging a pole hold for a blind or low vision skier?

Describe different types of guiding systems.

Describe different positions from which a guide may work. What are the advantages/disadvantages of each position?

IV. Disability/Medications

Who is a candidate for bi skiing? mono-skiing, 3-tracking, 4-tracking, Guide services or a specialized cognitive related disability lesson? Why?

How is a potential skier assessed for skiing?

What questions should be asked about the students' diagnosis, medications, treatments, medical needs and athletic abilities?

For each specialty/disability cite classes of medications and their side effects that may be used. Know specific examples for each class.

List the vertebrae and their associated nerves, muscles and body functions.

Define autonomic dysreflexia. List the signs/symptoms, when it occurs and the level of injury with which it is typically associated.

What precautions must one take if the student has spinal stabilizers? Think about stand-up skiers as well as sit-down skiers.

How does an amputation affect balance and strength? Make sure this is answered for mono and bi-ski as well as 3 and 4-track.

What precautions must one take to protect a residual limb? A brace? A prosthesis worn while skiing? Should Skier with an amputation wear their prosthesis while 3-tracking? Why or why not?

Define and describe as much as you can about the following conditions. They are listed under the specialty where they are commonly seen but that does not mean they cannot show up in another specialty. This is not an exhaustive list!

FUNCTIONAL SKIING

Functional skiing is defined as the basic skill level needed for instructors to safely and successfully teach adaptive skiers. Whether guiding a blind skier or safely tethering a biski, instructors should exhibit a minimal level of competency in order to be most effective with special-needs students. PSIA-NW has identified specific skiing maneuvers and tasks that when practiced; enhance an instructor's demonstrations, personal skiing ability and the ability to assist students utilizing specialized equipment. These maneuvers can also be used as teaching tools and exercises to build the fundamentals of skiing for any discipline. Specific types of terrain and snow conditions (such as bumps and variable snow conditions) are practiced so that instructors can provide lessons in a variety of mountain situations. As the baseline for all levels of Adaptive Certification, instructors must demonstrate proficiency with all functional skiing maneuvers and tasks listed below. This minimum standard not only increases teaching effectiveness, it helps develop solid technical understanding into how turns develop and the specific skills and skill blends utilized at different levels of skiing.

Side Slip to Hockey Stop

This maneuver is extremely important as a method used in tethering mono or bi-skis, guiding blind students or working with any other disability. The Side Slip to Hockey Stop is essential for mastering the beginner terrain moving into the intermediate zone and can be performed in any discipline.

This maneuver is performed on smooth, easy blue terrain.

Description: From a straight run in the fall line, initiate a sideslip through simultaneous turning of both legs across the fall line while maintaining a stable upper body and balanced/neutral stance. *(A slight flexion of the legs will enhance the ability to turn the feet and legs independent of the torso)*

1. While side-slipping, a natural lead of the uphill ski and body keeps hips free to adjust edge angles. Upper body should face down the hill while skis turn across the hill.
2. Sideslip should be maintained in a narrow corridor, without traveling across the hill in a corridor no more than the approximate length of 1 ½ skis.
3. Continuous fore-aft adjustments will help maintain a perpendicular sideslip with minimal travel across the hill.
4. After a distinct side slip, progressively tip both feet and legs into the hill to engage edges to a balanced stop, or "hockey stop."
5. Continuous adjustments from foot-to-foot will help center skier over both skis.
6. Reverse direction and repeat the maneuver to the other side.

Falling Leaf

This maneuver allows instructors to move slowly down a hill (similar to the side slip), while adjusting across the hill to match the adaptive student's path of travel. The Falling Leaf maneuver saves instructors from having to wedge in the fall line, thus making it an energy-efficient way to ski with novice adaptive skiers. When used as a ski drill it teaches the adaptive student about pressure control and is a great task used in the advanced beginner zone. This maneuver is performed on steeper green to easy blue, groomed terrain.

Description: From a side slip in the fall line, use feet and legs to steer skis back and forth across the hill. The skier maintains the same directional orientation while the skis move forward and backward. A swooping Z-shaped pattern with coordinated blending of skills will help maintain speed control and allow the skier to maneuver as desired across the hill.

1. From a side slip in the fall line, use coordinated flexing and extending movements of the joints, along with for/aft pressure of the skis, to allow the skis to move forward and backward across the hill.
2. Use turning movements of the legs and feet as necessary to control shape and speed.
3. Use tipping movements of the feet and legs to control edge engagement.
4. This maneuver should be symmetrical with the fall line.
5. This maneuver is performed in both directions.

Traverse - to Diagonal Side Slip - to Traverse

This maneuver is another way for instructors to move slowly across the hill while assisting students, without having to hold a wedge position. The ability to control the degree of edge engagement and make subtle adjustments is also an important skill when tethering adaptive students on specialized equipment. As an exercise, it enhances the student's ability to maintain balance and stance while establishing edge control. This maneuver is performed on steeper green to easy blue, groomed terrain.

Description: From a clean traverse across the fall line, use ankles and knees to release the edges of the skis so they side-slip diagonally across the hill. After a brief period of diagonal side slipping, re-engage the ankles using ankles and knees and continue in a clean traverse across the hill.

1. From a traverse, release both edges to a forward side slip through simultaneous tipping movements of the feet and legs.
2. The upper body should remain stable and in a slightly countered relationship to the feet and legs. (*Counter is developed through turning movements of the feet and legs*)
3. After the diagonal side slip, re-engage both edges through simultaneous tipping movements of the feet and legs.
4. Perform this maneuver in both directions across the hill.

Short swing

Description: Short turns down the fall line typically in a corridor of ½ a packer width or narrower with emphasis of increased edging and steering and pole plant at turn completion.

Hour Glass Parallel Turns with Progressive Radius Reduction

It is an important for adaptive instructors to be able to change the radius of their turns while maintaining speed control in order to manage specialized adaptive equipment safely. Hour Glass Turns are an excellent way to practice this skill and to teach to any level of student.

Description: This maneuver is a series of parallel turns that start from a medium radius. Each subsequent medium radius turn decreases in radius to become short radius turns. From short radius, the turns are then increased once again back to medium radius turns. The entire series of turns paints an "hour glass" track in the snow. This maneuver is performed with consistent speed control, using turn shape, so that the short radius turns are no faster than the medium radius turns. If numbers were assigned to each turn size, the larger turns might start at 6 then progressively get smaller, to a series of turns at a size of 2, and then back to the larger turn size of 6. The sequence might look like this, 6 – 5 – 4 – 3 – 2 – 2 – 3 – 4 – 5 – 6. This sequence would be repeated until reaching the agreed upon stopping point and finished with a hockey stop. This maneuver is performed on harder blue to easy black groomed terrain with an even fall line pitch.

1. Turns can be performed as a basic parallel or dynamic parallel (depending on the skill level of the skier) or be performed disability specific.
2. All skiers should perform this maneuver with a balanced, centered stance.
3. Turns should be symmetrical on each side.

4. A distinct difference from the medium radius turns to the short radius turns and back to medium radius should be evident.
5. Speed should remain consistent throughout the entire demonstration.
6. Speed control is achieved through skill-blending and turn shape.

Free Ski Run

Watching skiers ski their preferred turns, or “free ski”, allows for an assessment of their basic skiing mechanics. Most skiers have specific styles and preferred turning mechanisms that either enhance or hinder their ability to ski a variety of terrain or perform specific skill-based maneuvers with accuracy (such as a hockey stop). Adaptive instructors are assessed while free skiing to help coach them towards better skill and greater overall skiing success.

Description: Skiers are asked to ski a section of hill at their own pace and in their own personal style. With the previous set of skiing maneuvers, the maneuvers themselves dictate a skier’s basic skill, their ability to blend skills and their basic understanding of what to do with their skis and body in order to successfully perform the maneuver. For example, a skier cannot successfully perform a side slip if they are unable to release their edges and allow the skis to slide sideways down the hill. In free skiing, the task does not necessarily outline success. Skiers can ski down a slope and „make it”, but their overall technique may be flawed. In this task, there are certain guidelines that account for successful free skiing or for free skiing that needs some work. Typically, if a skier has a flawed overall technique, it will not only be apparent in their free skiing, but their ability to perform specific maneuvers (like a Stem Step Turn) will be hindered as well. The free ski run is performed on groomed blue or easy groomed /black terrain.

1. Turns should be linked (no traverse) at a minimum of dynamic parallel *or disability equivalent*.
2. Skiers should be able to utilize ski design and skill blending to create turn shape.
3. Stance should be balanced and centered.
4. Progressive movements should be used to simultaneously steer the skis through the turn.
5. Speed is controlled through turn shape and should be consistent for the entire run.

Bump Run

It is important for adaptive instructors to be able to ski in bumps so that they can effectively work with mountain skiing students in a variety of situations.

Description: Skiers are asked to ski a section of hill with relatively easy bumps at their own pace and in their own personal style. Since bumps can change drastically from turn to turn, skiers should be able to “adapt” their skiing and adjust their turns to meet the demands of the situation. This task is performed on blue bumps runs, with a moderate pitch and smaller sized bumps. Only one of the following will be examined:

1. **Fall-Line Bump Skiing** with...
 - a. Rhythmical, linked, parallel, short to medium radius turns (no traversing or stemming).
 - b. Consistent speed maintained through turn shape.
 - c. An appropriate blend of skills.
 - d. Tactical choices appropriate to terrain and snow conditions.
2. **Medium to Large Radius Turns in the Bumps** with...
 - a. Linked turns showing a balanced and centered stance.
 - b. Maintenance of ski snow contact through absorption.
 - c. Consistent speed maintained through turn shape.
 - d. Tactical choices appropriate to terrain and snow conditions.

Variable Terrain and Snow Conditions

Some of our adaptive students enjoy the experience of seeing the whole mountain. Whether low intermediate or advanced, students will need an instructor capable of skiing with them no matter what the terrain is or what the conditions of the day may be!

Description: Skiers are asked to ski a section of hill that has not been recently groomed. Skiers should be able to “adapt” their skiing and adjust their turns to meet the demands of the situation. This task is performed on an *un-groomed* blue run.

1. Turns should be linked (no traverse) at a minimum of dynamic parallel *or disability equivalent*.
2. Skiers should be able to utilize ski design and skill blending to create turn shape.
3. Stance should be balanced and centered.
4. Progressive movements should be used to simultaneously steer the skis through the turn.
5. Speed is controlled through turn shape and should be consistent for the entire run.

Synchronized Skiing with one or more Partners:

As adaptive instructors, these adjustments must be made in order to successfully meet the skiing needs of our students.

Description: Skiers can synchronize their skiing in pairs or with 3 or more other skiers.

In this task, the group of skiers will cue off the designated leader and match their turns exactly. Typically a set rhythm is established, along with a starting turn direction left or right. All skiers start and end together at the same time. Voice cues help to establish basic rhythms and other performance criteria. There are a variety of group formations that can be utilized when synchronized skiing, such as side-by-side, skier in front and behind, lines, diamond formations, flying “V” formations and others. This task is performed on groomed blue to easy groomed black terrain.

1. Skiers should have the ability to pace as the leader and adapt as the follower(s). The leader is responsible for setting up the synchronized skiing exercise. The follower is acting according to how the leader sets up the task.
2. Turns should occur at the same time rather than in each others tracks.
3. Skiers should have a coordinated finish with a balanced hockey stop.
4. The leader and follower switch roles and repeat the same task, but this time the exercise is set up by the new leader.

What to expect/timing (Typical)

8:00 – 8:30 Sign In, Collect Written Exam

8:30 – 9:00 Exam Scoring

9:00 – 9:15 Introductions - People / Logistics / Exam format / Exam event & group safety

9:15 – 9:45

What type of students with disabilities might we be assessing and skiing in this module. This will be open discussion.

Adaptive Equipment & Disability Discussion

9:45- 10:15 Assessments --you will role play student and or instructor. Examiner will assign role play

10:15 – 11:30 Safety, Loads & Unloads out on hill

Riding the lift and Safety

7 elements of the responsibility code,

Assists

11:30 – 12:30 Working Lunch

Disabilities description Medications / student assessment / Adaptive teaching model- learning & teaching styles

12:45 – 3:15 On hill scenarios

Adaptive teaching – Teaching progressions, sharing information on skill development and exercises, on hill movement analysis/ proscription for change.

3:15 - 3:30 Summarize - Any questions / issues prior to finishing exam. Meeting place for results.

3:30 – 4:30 Scoring & packet preparation

As you can see there is a lot of information to be shared please plan accordingly and help utilize the time wisely.

REFERENCE SECTION RESOURCE LIST

Bold Tracks, Teaching Adaptive Skiing, 3rd Edition National Sports Center for the Disabled Hal O'Leary
970-726-1540 www.nscd.org

Most of these publications are available through your PSIA-NW or National Office

PSIA Adaptive Manual

PSIA Alpine Manual

PSIA Alpine Handbook © 1996

PSIA Core Concept

PSIA level 1 study guide

NW Adaptive manual (on PSIA-NW web site)

PSIA- NW Cog/VI and Mono/Bi study (on PSIA-NW web site)

Any current Drug Reference Physician's Desk Reference Book (PDR)

Medical Dictionary, Internet search.

****Most ski schools have these references and/or know how to obtain them. Check with your home Adaptive and Alpine ski schools. ****