Wachusett Mountain Learning Center I.T.C. PSIA American Teaching System

Student Centered, outcome based, experiential, guest service driven



Wachusett Mountain Learning Center Instructor Training Manual (ITC)



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Welcome to the Instructor Training Course 2023-2024 Season

General Information

This manual includes a partial summary of the Professional Ski Instructors of America (American Teaching System). The exercises included are few and intended to help you with the rudimentary stages of teaching, class handling and customer service. The skills, goals, exercises, movement patterns, trail and lift use, addressed in this manual are geared toward most people. When teaching children, seniors, or those with special needs, modifications in lesson plan, class handling, strategies, tactics and expectations, may be necessary, *and* may require specialized training for optimal results.

Upon successful completion of our Program, and subsequent hiring as a Snow Sports Learning Center Staff member, realize this is the beginning of your journey in the world of snow sports. Your personal and professional development is expanded and enhanced through attending clinics offered by the Wachusett Learning Center, and through PSIA events. With this development, you will enhance not only your skills, but the experience and successes of your guests.

Enjoy the course and Good Luck!

Courtney Crowley
Director of Snow Sport Services
Pat McCowan
Alpine Technical Director

Necessary Information

- Sign in and out, at the Learning Center in the A-Frame building, whenever you are on the mountain
- Complete an evaluation of your course conductor(s) each day of the Program
- Do not bring your equipment into the buildings
- EVERYONE MUST follow parking attendant's directions
- Be prepared and ready to be on snow for 9:00AM, after brief meeting in the Lodge. Dress appropriately for weather conditions. Our goal is providing a safe environment for learning for everyone.
- You will be given written take home test, to be completed, prior to course completion
- Each candidate is evaluated daily, People Skills, Potential and Attitude, demos, Skiing (to Level 6), teaching (to level 4), class handling, and simple movement assessment analysis. Final scores will be averaged based on the number of days each individual attended. The more times you attend the sessions, will improve your overall scores.
- The Program is based on the attendance of 4 Modules: Teaching Level 1-4, Teaching Children, Class Handling, and Personal Ski Improvement. Every candidate must attend each Module at least once. If a Module is missed, your final scores will reflect that omission.
- You are entering the Profession of Snow Sport Instructors, dress and act as a Professional.

If you have questions, ask any course conductor, we are here to help you get the most out of the Program. If we are on snow and in full operation during the course, please feel free on your off times, to ask the Learning Center Supervisors, to shadow a real class so that information can be reinforced.

For information and updates on ITC, call 978-464-2300 ext. 3116 after noon on Friday

Please DO NOT leave messages on this line

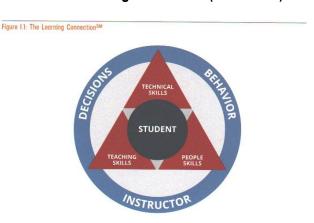
Service Concepts

Always strive for excellence in Customer Service, it is essential for the growth and retention in our snow sports industry. Our love for snow sports is reflected in our carriage, presentation, and willingness to help make the most of our guests' experiences. Treat your customer, as you would like to be treated. The love for our sports is infectious, pass it on through good customer service. As a snow sport instructor, you spend more time with the customers than any other person on the Mountain. Your presentation, demeanor, appearance, and knowledge, are important to successes of our customers, their return business AND retention in the Snow Sports Industry.

- ◆ Help your students relax, develop trust: get their names and use them! Have fun, it helps foster learning
- Go the extra mile. If you see someone who may need help, ask if you can be of assistance, welcome them to Wachusett, help them have a great day!
- Be a good listener. Look at the person, pay attention to **what** they are saying. You are here to help them learn. Ask questions to help clarify the message they are sending.
- ♦ Non-verbal communication can be more important than the spoken word! Actions speak louder than words. Smile, use eye contact, do not interrupt. Be professional in your appearance (adhere to Learning Center Dress Code) Greet your guest in uniform this is your red jacket, or appropriate logo wear for the weather. Wachusett does not have official Rain Gear, so neat and clean outerwear which will allow you to keep dry during your teaching sessions is appropriate. As weather gets warmer, your red jacket, Wachusett Logo wear vests, Wachusett Logo wear LONG SLEEVED shirts are acceptable, with your name tag. Short sleeve tees, or sweatshirt hoodies are NOT acceptable. Wear hand covering at all times, regardless of the temps. Use spring gloves designed for snow sports as temps increase. Gloves and ski poles are part of your uniform!
- Provide closure. Whether you just stopped to help a guest, or you are in a lesson, make sure you have completed the service they expected. A person's strongest impressions are of the beginning and the end of a lesson. End your lessons with a recap of accomplishments, direct them where they can ski. Give them the highlights of their next lesson for the development of skills. In a child's lesson, provide this info to the parent/guardian, let them know what to do to help anchor and reinforce the skills developed during the lesson. Encourage them not to use trails above their skill level and ability, as it results in ineffective, defensive movements.

You have certain expectations and goals of this course, it is true of each of your students as well. Find what your student is looking for, direct and guide them to meet their needs. Make sure they are in the right place, the correct level. Are their expectations realistic? Create a plan to help them reach their goals, provide them with a successful, memorable experience!

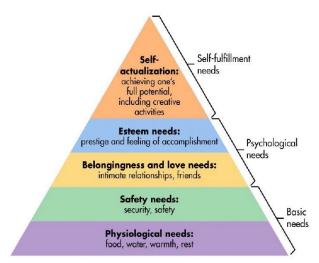
The Learning Connection (PSIA-AASI)



The Student is in the Center of learning environment, the instructor is represented by the outer ring. It is the goal and responsibility of the instructor to understand student goals, motivations and skill set, to present a plan

and direct the student toward a successful outcome. This model incorporates the use of People Skills, Teaching and Technical Skills.

MASLOW'S HIERARCHY OF NEEDS



Maslow's Hierarchy of Needs Maslow's hierarchy of needs is a motivational theory in psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within a pyramid.

Needs lower down in the hierarchy must be satisfied before individuals can attend to needs higher up. From the bottom of the hierarchy upwards, the needs are: physiological, safety, love and belonging, esteem, and self-actualization. **Basic Needs:** These are the needs we have to exist; food, water, warmth and rest. These are particularly important with our children's lessons. If a child is hungry or tired they simply will not be able to learn how to ski. Varying degrees of this make it important in your initial assessment to find out: Did you just

arrive at the mountain, or have you been skiing all day? Have you had breakfast or lunch and something to drink? What are their fears? Your students should feel safe. Everyone's comfort zone is different. You have an opportunity to build trust by reading their level of discomfort or anxiety and provide an appropriate support for that individual. Psychological Needs: " People don't care how much you know until they know how much you care.." Create a positive learning environment, considering both physical and emotional safety. If someone is having a hard time, simply lifting your goggles and making eye contact with them, can go a long way to making them feel like they belong in your lesson. Provide continuous positive feedback for every accomplishment will help build self-esteem. Self-fulfillment Needs: Accomplishing even 2 turns on Ollie's can provide someone with a huge sense of accomplishment. This may be their only goal for accepting their personal challenge of learning to ski.

The Learning Connection: People Skills Trust, Likability & Expertise



- based on trust.
- · Engage in meaningful, two-way communication.
- · Identify, understand, and manage your emotions and actions.
- · Recognize and influence the behaviors, motivations, and emotions of others.

BE genuinely empathetic: Share your emotions with your guests. **E-**Eye contact

M-Muscles of facial expression- share your smiles with your quests

P-Posture, watch your body language and your guests

A-Affect, your personal demeanor, verbal and nonverbal!

T-Tone of your voice, reflect excitement of success

H-Hear what your guest is saying, understand the whole person

Y-Your response, manage your emotions, be supportive and respectful. From the outset you can help develop trust by observing what your guests are wearing, check that they are warm enough, boots on the correct feet. Be aware and live the Responsibility Code, state the components of the Code, so your guests can understand safe behaviors and activities and hopefully understand you are there to provide a safe and successful experience. Consider that without strong people skills, the cornerstone of the Learning Connection falls apart, successes will be limited, or impaired. Development of trust is fundamental, it is achieved through

respect, good judgement, being understanding, supportive, attentive, inspirational; your expertise is reflected in your actions during your lessons, how you handle challenges, solve problems, direct student learning.

As instructors we are met with many challenges, the greatest ones are dealing with multiple age groups, different cultural backgrounds, as well as individual emotions. It is our job and our goal to be inclusive of every

participant in our group, develop your student's trust by being aware of their emotions, open communication with each guest to better meet their needs and goals to achieve success. We need to remember that we need to approach children differently than adults, and we need to interact differently to achieve the same goals. Children are not just small adults, they have issues of their own, they may be dealing with separation from a parent and family, or dealing growth spurts that may make them a bit clumsy, until their muscles can catch up with the growth of their bones. They may be dealing with hormonal changes of adolescence or maturity, that they are not totally be aware of or understand. We as adults, have to guide them to help them understand the following of rules, or taking turns and being a team player, but we need to convey this in a supportive manner, which will help build mutual respect. **Think before you speak**, there are many ways to state the same thing, be aware of you student's mindset and emotions.

You are the **Professional**. Understand the customer, listen, what is their motivation, goals and needs. Propose a plan of action, that is agreed upon and it matches what they are seeking. Provide service and **EXCEED EXPECTATIONS**

Essential ingredients of a good lesson: Safety-Fun-Learning

- Safety! Develop trust, understand who they are, their skills, goals for that day, OR for the Season
- Student-centered. Relate movements in skiing, to other sports they play, for lateral learning.
- Use tasks or drills that are clear, concise and with a purpose to build OR develop skills
- Have Fun
- Feedback (For Learning to take place)- keep it positive (let's try that again, but try it this way)

At the Lesson outset, make sure your guests:

- Are in proper equipment: boots are on the correct feet and buckled, ski size is appropriate, bindings are adjusted correctly by the rental shop. Correct length poles (Children do not need poles until level 5/6)
- Clothing is appropriate for the weather. Gloves, hat/helmet, goggles, Children are not allowed in a lesson without proper attire, mittens/gloves, hat or helmet minimum! **Bicycle or hockey helmets are not designed for snow sports!**

The Learning Connection: Teaching Skills



- Collaborate on long-term goals and short-term objectives.
- Manage information, activities, terrain selection, and pacing.
- Promote play, experimentation, and exploration.
- Facilitate the learner's ability to reflect upon experiences and sensations.
- Adapt to the changing needs of the learner.
- Manage emotional and physical risk.

Fundamentals

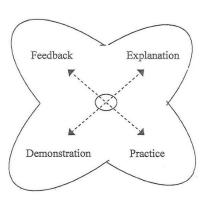
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- Manage risk- emotional & physical

Keys to good Customer Service: Remember the acronym C-O-V-E-R-S

- Customers are our prime concern. Be Courteous, Credible and take Control. Remember, Communication is both Verbal and non-verbal, hand gestures, postures and facial expressions will communicate.
- ➤ **Observe**. Common sense in class handling and physical appearance
- Virtues- Take pride in your profession. Treat others as you would like to be treated. Be mentally and physically fit.
- Exhibits leadership and sound judgment. Efficiency in work.
- ➤ Command **Respect** through knowledge and carriage. Be **Reliable**
 - Speak well, simply and stay on track

Review and Preview Guide Practice Create Experiences for Learning Cycle Welcome and Introduction Assess Students Determine Goals and Plan Experiences

Pattern of Teaching



Introduction-Set the tone for the lesson, what are your guest's goals and expectations. Assess motivation, athleticism, fears. What other sports are they involved in, to tap into the lateral learning experiences. Set goals, develop and present a plan to meet those goals, get their buy in, make sure goals are understood and achievable within the time frame you are with them. Adjust your plan as needed.

Lesson Content: Explanation, Demonstration, Practice, Feedback and Summary! Play, Drill, Adventure, Summary

LEARNING STYLES

An important part of understanding teaching concepts, is making sure to address the Learning Styles of each person. It is equally as important to understand your own learning style, as it becomes an integral part of how you present and handle class situations. Although there are many learning styles, the most common fit into the **VAK Model**, Visual, Auditory and Kinesthetic Learning Model.



Visual Learners, learn best by **watching!** Accurate demos are imperative, they benefit from following in your tracks, so they can better anchor the movements you are showing. Demonstrate moving toward the class, in front of them and away from them. Repeat your demos every 3rd or 4th participant. Children are visual learners! Demo and demo often, allow each child to follow directly behind you during your lessons.

Auditory Learners are the Listeners, they learn best by hearing a description of what they should do. Be concise, descriptive and brief using terms that they will understand. Relate movements to other sports.



Kinesthetic Learners, learn by feeling movements. When demonstrating and explaining, make sure you state what sensations they should feel while performing a task. An example: when gliding down the hill in a wedge, you will feel your weight on the big toe side of each foot, and your shins against the tongue of the boot, in a 10 or 2 o'clock position. Reinforce this explanation by allowing them time to practice. Kinesthetic learners are the "Doers" and "Feelers". An important point for all is you cannot change a movement pattern unless you can FEEL the difference.

Be aware of what sensations you feel, what sensations you feel when body parts change position. When teaching, address all three types of learners. **Describe** things simply, **demonstrate** accurately and **state the sensations** they may have inside their boots and with body positions. Allow time for **practice**, use movement analysis to provide feedback, so that learning proper technique can occur.

Learning Retention

Reading 10%
Hearing 20%
Seeing 30%
Seeing and Hearing 50%
Doing 90%

Motor Learning

Regardless of the learning style, in order to learn a new skill, or modify one you already have, you must be able to **feel** and appreciate the differences in sensations. Through your ski teaching career, you will use multiple drills to highlight specific skill development. Tasks and drills you present will be different from person to person, but the **motor learning process** is always the same. There are three stages to Motor Learning: Cognitive, Associative and Autonomous. (Fitts and Posner Stages of Motor Skill Acquisition)

Cognitive: The first stage, (verbal-visual phase), is when the student tries to get a mental picture of what the movement is, your accurate demonstrations are important! They ask a lot of questions and explore the new movement by trial and error. First movements are usually inefficient, muscle tension is high and movements may not be fluid. Your feedback (extrinsic) is important during this phase, when you see a correct movement, let the student know, "that was it, What did you feel inside the boot or at the top of the boot cuff? That is the sensation you want whenever you move down the hill!" By providing immediate feedback for correct movements, the student can anchor the sensations of those movements, and be able to repeat them, even when you are no longer with them. They will get their intrinsic feedback through sensations, and movement outcomes. Student practice and experimentation is an important part of this cognitive stage, so they can absorb the information and the sensations of the movements. This translates to, DO NOT RUSH to get up on the lift, for your first timers. Do not go to steep too fast! Work on gentle terrain, change turn shapes and speed before moving to more difficult trails.

Associative Stage: The student now grasps the basic movement pattern, they become more efficient and refined, and less is achieved through trial and error. The student has less muscle tension and some of the simpler movement may even become automatic. This stage of learning can be the longest, because although the student knows the movement pattern and what they are supposed to do, that is not enough. They have to be motivated, to continue their practice with a purpose, they need perfect practice. Feedback at this stage, becomes more intrinsic than extrinsic, although it is important to continue to choose appropriate drills that improve movement patterns. A coach needs to observe practice and reinforce positive and efficient movements such that the 3rd stage of motor learning can occur more readily.

The last stage, is The **Autonomous Stage**: Movements are smoother, more accurate, consistent, and fairly automatic. They no longer think about every movement, they are integrated and they can react quickly. One issue with this final stage of learning is that once 'muscle memory' has occurred, if it is not the correct memory, it becomes difficult to 'unlearn'. This again goes back to the importance of feedback for both correct and not so correct movements. You want the student to anchor efficient and correct movements from the outset.

Another important concept in motor learning is the use of **Internal and External Cues** to help your guests learn a movement pattern. Internal cues are when you ask an individual to move a certain body part to achieve an affect. Example is, 'point all 10 toes in the direction you want to go', does this work, yes perhaps, but it has been determined that people learn faster, and retain more, if you use External Cues, use anything outside the body, ie, the skis. So in addition to stating, point all 10 toes where you want to go, add 'while using your wedge, turn your ski tips where you want to go.', or, tip you right ski toward the little toe side of the ski, your left ski toward the big toe side of the ski while pointing your ski tips where you want to go. Create your own Cues to help your guest achieve success. Use **Objects**, what to head at, where to go, and distance you want to travel. Use **direction**, turn toward or away from something. Use **Descriptions**, use of action words. External Cuing, **Describe**, this is the auditory, **Demonstration** is the Visual Cue, phrase that will focus on movement, "**Feel** the boot cuff on your shin as you Do this" is kinesthetic. Debrief is feedback.

The Learning Connection: Technical Skills



- Convey and apply accurate technical information – for the sport being taught (alpine skiing, cross country skiing, snowboarding, or telemark skiing).
- Observe, evaluate, and prescribe (through movement analysis).
- Alpine Skiing Fundamentals
- Snowboarding Fundamentals
- Cross Country Skiing Fundamentals
- Telemark Skiing Fundamentals

- Describe skier performance relative to the interrelationship of the fundamentals in all phases of the turn.
- Describe ski and body performance evaluating how movements affect ski performance within any fundamental and its effect on other fundamentals.
- Prescribe specific change in multiple skiing fundamentals to create a change in desired outcome.
- Identify and manage equipment issues in relationship to the student and their objectives in the advanced zone.

Fundamental Skills Used in Skiing

Balance---Rotary Movements----Edging Movements----Pressure Managing Movements

BERP

These are Nouns, the Concepts essential for skiing

Fundamental Movements of Skiing

These are the Verbs, the explanations of how we efficiently use the Nouns

- → Control the relationship of the Center of Mass (COM) to the base of support to direct the pressure along the length of the ski. COM remains over the feet and moves in the direction of the upcoming turn, shortening the new inside leg, lengthening the new outside leg. Or, by pushing or pulling your feet fore and aft. Standing in the middle of the foot, the arch, allows for weight to be even distributed along the length of the ski, so you can effectively use it from tip to tail. Pressure is NOT applied to the ski, your movement, gravity and the forces in the turn, directs your weight, to the outside ski. Hand and arm movements aid balance, and complement directional movements.
- → Control the pressure from ski to ski and direct the pressure toward the outside ski. Moving from foot to foot to transfer weight. Flexing and extending (closing and opening of the joints) to manage the pressures generated from gravity, the turn and terrain; diagonal directional movements of the COM in the direction of the new turn, shortening the new inside leg, lengthening the new outside leg, weight is transferred to the new outside ski. PRESSURE IS NOT APPLIED to the ski.
- → **Control the edge angles through a combination of inclination and angulation.** Tipping of the feet and legs to engage and release the edges. The movement of the COM, in the direction of the new turn allows a simultaneous, release and re-engaging of the edges.
- → Control the skis rotation (turning, pivoting, steering) with leg rotation, separate from the upper body. Rotary, movements of the skis originate in the legs. The core, upper body, supplies strength and functional tension to the inside half of the body to facilitate the steering activity of the legs. The inside half of the body enters the turn before the outside half, the legs, turns more than the upper body. These movements allow us to guide skis through an arc.

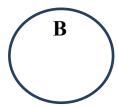
opening
joints to

R-Rotary
Control
Movements
Stance

Page 9 ITC Manual 23-04

P-Pressure
H-Edge
Manaying
Movements
Movements
Movements

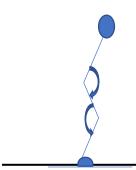
Regulate the magnitude of pressure created through ski/snow contact. Flexing and extending, closing and of the ankle joint, along with the harmonious flexing of all the remain in a state of dynamic balance.



Blending and Integration of Skills: Through every level of skiing, the fundamental movements, are blended with different emphasis or intensity depending on the skier's skills, snow conditions and steepness of the terrain. The manner in which the skills are blended will reflect efficiencies or inefficiencies in the skier's movements.

Balance is stability produced by even distribution of weight; Dynamic Balance is maintaining balance while in motion. Being in the state of dynamic balance allows you, to do what you want, when you want and the way you want! The entire body is involved and participates in balance. Fine adjustments for balance originate in the ankles. We are balancing into the future, which is achieved through diagonal directional movements as we move down a slope. Moving our body so it remains over our base of support, our feet A change in stance; flexion and extension of joints, increase and decrease in muscle tension, fore and aft movements, movements of head and hands, or of the entire body all can have an effect on our state of dynamic balance

Regardless of the level, an athletic stance, creates a solid foundation to move from. Feet are hip distance apart, weight is felt over entire foot, but concentrated on the arch, shins are in contact with the front of the boot, hips are over the feet, lower back and shoulders are slightly rounded, nose is over toes. Arms are bent at the elbows, elbows are ahead of the rib cage, hands are ahead of elbows and slightly narrower than the elbows. This stance, allows us to remain in a state of dynamic balance at every level of skiing





The angle of the lower leg & torso is the same; the angle between the lower leg and the femur, is the same and the angle of the femur to the torso is the same. This is BALANCED

The angle of the lower leg and torso are NOT the same, angle of the lower leg to femur and femur to torso are NOT the same; this is NOT BALANCED

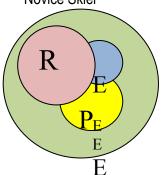
Integration of skills through all levels of Skiing

Novice Zone skiers: Stance (green circle) and Balance is the important foundation, rotary is introduced for turning, edging and pressure management movements are minimally utilized. There is a relatively low integration of the skills, speed control comes from friction of skis on the snow and turn shaping. (Levels 1-3)

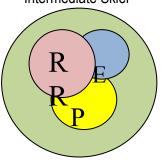
Intermediate zone skiers: Stance and Balance is fundamental, rotary allows for turning and guiding the skis through an arc, edging movements are being developed, but come more from the pitch of the hill rather than through tipping of our legs, pressure managing movements develop as speed and pitch increase. There is a partial integration of Skills, speed control comes from friction and turn shaping. (Levels 4-6)

Advanced zone skiers: There is a full and complete integration of the skills. Speed control is from turn shape (Levels 7-9)

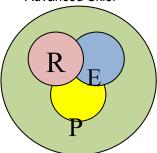
Novice Skier











In a Wedge: Application of Fundamentals:

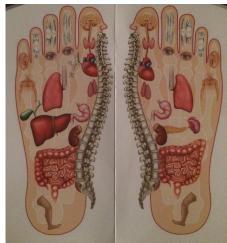
- → Skis-stay in a wedge through all turn phases, with the tips closer together than the tails
- → The edge of the downhill ski is released before turn entry, while skis stay in a wedge.
- → Wedge remains relatively the same size during the entire run and feet should be roughly hip to shoulder width.
- → Skisare guided through round turns with steering from the feet and legs.
- → Joint use allows skier to accurately direct pressure along length of skis. Ankles remain flexed, knee and hip joints are opened to move COM in the direction of new turn
- → Pressure is directed towards the outside ski.



In Parallel: Application of Fundamentals:

- → Skis remain parallel and the legs remain a consistent distance apart through all phases of the turn.
- → Both skis' edges are released at the same rate and remain on corresponding edges through all turn phases. The skis turn at similar rate to maintain parallel ski relationship.
- → Steering of the skis and turning comes from the leg rotation separate from the upper body.
- → Pressure is directed towards the outside ski and the relationship of COM to the base of support should be maintained to direct pressure towards the center of the skis.
- → Pole swing and touch should be directed roughly towards the apex of the new turn which helps to assist in releasing of the skis



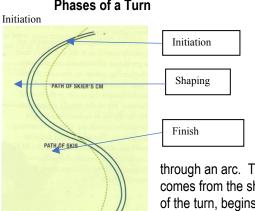


outside ski through of movement of the upcoming turn. The inside leg shortens, The skis are actively guided into the Fall

Shaping: The control phase of the turn, into, through and just across the Fall line the shaping of the turn. Speed control changing direction. Finish: The last third until direction change is complete.

Left is a Reflexology chart which highlights the importance of being balanced over the foot, our base of support. Note the spine is placed along the arch side of the foot highlighting where we should be standing in our boots to allow for active use of our skis from tip to tail. The heaviest part of the spine, the base in directly on the arch, the spine ends before the heel. This illustration accurately emphasizes that standing on the arch allows for our mass to be balanced over our base of support.

Phases of a Turn



Initiation: The beginning of the turn, weight is transferred from the old outside ski to the new COM in the direction of the the new outside leg lengthens. Line. (Top of the Turn)

where the skis are actively guided through an arc. This allows speed control through comes from the shape of the entire turn and of the turn, begins after the Fall Line and continues

Task: What is happening? When? How? Page 12 I Why is it happening? Cause and Effect What do you change? How will it improve outcome?

Movement Assessment Analysis and Feedback

Evaluation of your guests' stance and movements are based on the Fundamental Movements of Skiing, the skills of Balance, Rotary, Edging and Pressure Managing Movements. Movement assessment is the basis of your

feedback. At all levels of skiing, an **athletic stance** is imperative to appropriately utilize and blend the skills, with our goal of maintaining dynamic balance. At entry level skiing, stance, and balancing while moving, are our major focuses, assessment and correction of movements are kept simple.

At any level, there is a blending of skills through each turn. IF you do not 'in balance', inefficient blending will occur, thereby forcing you to over utilize another skill to affect a change in direction, turn shape, speed control and stopping. The reverse is also true, if you are in a state of dynamic balance, but due to terrain conditions or changes...or Habit, you may over utilize a skill, it will result in a state of Imbalance.

The Process of MA...What to look at:

Whole to parts
Top down, bottom up
Skill efficiency= Edging, Rotary, pressure managing movements
Stance, turn entry and turn shape
**Ski Performance/ body Performance

**Relationship to the 5 fundamentals (What rotates, what tips, what bends)

Body performance is the Cause, Ski Performance is the affect. Identifying the affect before the cause can be easier to identify and work with, I see the ski doing this...because the body is doing this.

Ski Performance on Snow Surface: Turn Tip and Bend

Is the arc of the turn round?
Is pivot point under the foot, the tip or tails?
Skis stay same distance apart through turns?
Skis grip snow or slip snow?
Skis move simultaneously or sequentially?
Where is snow coming off the ski? Sideways or downhill?
Carved or skidded?
Edge angles similar or different?

Body Performance or Actions: Turn, Tip and Bend

Are joints flexing equally?
Shoulders level or tipped
Tipping from the legs or the entire body?
Head moving up and down?
Does body face outside the arc or inside the arc?
Is the outside leg flexed or straight?
Is inside leg flexed more than outside leg?
Inside foot ahead, behind, or next to outside foot Pole swing and touch, part of old turn or new turn Where is skier looking

Class Handling Module

- * People Skills, Development of Trust
- **★ Teaching Styles-Command and task**
- **♦ Class Line up**
- **♦ VAK Model (Review Page 7)**
- * Terrain selection
- * Responsibility Code
- ★ Time for Practice: Explore, Experiment and Play!

An important part of your teaching format, is that of class handling. This is inclusive of being aware of your class, the ability of each participant, snow and trail conditions, crowds, cold, your surroundings. Remember the core values of **Safety, Fun and Learning**

- Learn your students' names and use it...it is OK to ask them again, if you forget
- Look at each participant while speaking and presenting
- Speak loudly enough to be heard over wind and snow guns
- Stay on terrain where your guest is comfortable so learning can occur. Pitch appropriate for their skill level and the task
- * Keep explanations simple and brief, Repeat demos every 3 or 4 people
- Outlined lift safety, loading and unloading procedures, for the carpet and chair lifts, and where to meet when they get off the lift.
- Stop in a safe place
- Live Responsibility Code and reinforce the content through your actions
- Provide time for guests to explore terrain and snow conditions, experiment with speeds and turn shapes, Provide feedback at all stages of your instruction.
- Thank them, ask them back, give them a Progression Card and a business card

Class Handling: How you organize your groups throughout the lesson. Use the double or single line set up especially for Levels 1 & 2., depending on terrain availability

→ Line up (With a larger class on Ollie's, form 2 lines and demo between them)

→ Semi-Circle

Each of these have the instructor in full view in front of the class

Class Handling Keys

Be Creative
Be Observant
Use Variety

 $\textbf{Explore} \ \text{different terrain features, as rolls, dips and bumps}$

Relate drills and progression to skiing skills

Teaching Styles

- ✓ Command- you are the focus of the group during the presentation. Best method when instructing children and lower levels
- ✓ Task- Once a concept is presented, you step back and observe. Good for intermediate and above levels, also can be used once your first timers are making linked turns on Monadnock.

Although there are 5 teaching styles, for the Level 1-4 and our ITC, please use only Command and Task for simplicity.

Terrain selection: Be Aware of...

Changing conditions, snow guns, ice, bumps, sun, flat light, sunset.

Obstacles!!! Other skiers, riders, rocks, bumps, snow snakes

Volume of skiers and riders, racers, and overall traffic on a trail.

Equipment safety brakes and runaways

Risk awareness, use common sense, follow mountain procedures

Safety through lesson, in choice of slope, task, skills, cold, wind, fatigue! You ALWAYS follow your class up the lift to make sure everyone loads and exits the lift safely.

Terrain selection for Skill Level

Learn to Turn>>Level 1- Ollie's or Easy Ride carpet lift, as numbers and crowds dictate.

Level 2: Begin with a run on Ollie's, or Easy Rider before proceeding to the Monadnock Chair. Evaluate the group's ability to turn in both directions and to turn to a complete stop. If you are confident that every member of the group will be able to safely ski the trails off the Monadnock lift, you can proceed to this chair.

Level 3: Begin this level on the Monadnock Chair.

Level 4: Begin on Monadnock Chair to work on the skidding and realigning of skis at turn completion. Proceed to the Minuteman Lift and Ralph's Run if the skill, athletic level, and emotional level (fear), allows.

Use variety to keep things moving and keep it FUN! Keep everyone safe, You as the instructor always load the lift behind your class on the carpet, and are in the last chair that contains class members, alert the lift attendant if it is the group's first time on the lift, so they can help guide your guests safely on to the lift, as well as to help with the safety bar for smaller children.

NEVER take your students on terrain above their skill level, this only results in inefficient and ineffective, bracing movements. It also places your guest, yourself and the Mountain at risk, should injury occur.

Responsibility Code (Plus)

There are elements of risk with skiing and riding that common sense and personal awareness can help reduce. Below is only a partial list, again use common sense!

- Always stay I control. You must be able to stop or avoid people or objects
- People ahead or downhill of you have the right-of-way, you must avoid them.
- Stop where you are visible from above and do not restrict traffic.
- Look uphill and avoid others before starting downhill or entering a trail.
- You must prevent runaway equipment.
- Read and obey all signs, warnings and hazard markings.
- Keep off of closed trails and out of closed areas.
- You must know how and be able to load, ride and unload lifts safely. If you need assistance, ask the lift attendant. You must have the skill to handle the difficulty of the terrain or snow conditions
- Do not use lifts or terrain when impaired by alcohol or drugs.
- If you are involved in a collision or accident, share your contact information with each other and a ski area employee.

Live the Code, Do Not Lecture the Code

Essentials of Safe Skiing

- Stay alert, be aware of those around you, and changing surface conditions
- > Stay focused, physical and mental tasks deserve your full attention
- Scan your surroundings, be aware of corners, blind spots, caution signs
- > Watch out for others, anticipate what another person might do, be aware of traffic patterns
- Leave Space, allow safe following distance of 3-4 seconds so you have time to react, should something unexpected occur
- ➤ Have an escape route, your safest position is where you can see and be seen
- Own the zone, your ability has to match the difficulty of the hill and your speed has to match conditions and traffic
- > Heads up to change, always look up when changing travel lane, look ahead and behind before changing task, direction or speed

The Unofficial Guide to Good Skiing

Visual Cues to effective and efficient skiing

BALANCING MOVEMENTS: Dynamic balance, when a skier can affect a change using any skill, with either leg, throughout the turn.

- The entire body is involved and participates in balancing
- Flexing originates from the ankles, supported by the knees, hips and spine
- Hips are centered throughout the turn, promoting movements forward through the finish of the turn
- Inside leg shortens, outside leg lengthens, setting up alignment, balance and weight on the outside ski
- The upper body remains more vertical than the lower body through the shaping and finish of the turn, creating angles which align balance over the outside ski
- The inside hand, shoulder and hip lead the turn shaping and finish, resulting in a countered relationship between the upper and lower body.
- Skier's hands are in front of the body, elbows in front of the rib cage, aid in balance

Edging Movements: Allows the skier to direct the skis to control the radius, shape and speed

- Edges are release and re-engaged in a single smooth movement
- Both skis are tipped early in the turn, strongest angles developing in or near the fall line
- Shins are in forward and lateral contact with boot cuff (2 & 10)
- Tension of the inside ski leg, maintains alignment, flexion of the inside ankle directs movement forward and laterally for edge angle adjustments

Diagonal Directional Movements

- Skier extends into the new turn to change edges and moves forward along the skis, through the turn
- Ankles knees, and hips move forward and laterally toward the apex of the new turn
- The hands are forward and the inside hand, shoulder and hip lead through the turn
- Skier vision is forward in the intended direction of travel
- Pole swings smoothly and complements the movement of the body in the direction of travel

Rotary Movements

- Legs turn under a strong stable upper body, to help guide the skis through the turn
- Both skis and leas turn together throughout a parallel turn, with the femurs turning in the hip sockets.
- The skis are tipped and turned an appropriate amount to create a smooth 'C' shaped arc
- Rotary steering movements which redirect the skis at turn initiation are matched in timing and intensity by tipping the skis to prepare for increased forces cause by edge engagement; and are progressive, except for athletic moves needed to recover balance

Pressure Managing Movements: Flex and extend the ankles, knees, hips and spine to balance over the ski as you flow with terrain and manage pressure on the skis.

- The outside ski bends from the middle.
- The shins maintain contact with both boot tongues.
- The body flows continuously with the skis, and the skis flow over the terrain.
- All joints work together harmoniously

This information is intended to be an analytical tool and a reference for good skiing in most ski instruction situations. It is not intended to describe every movement or position that high-level skiers pass through in the extreme situations of World Cup racing or mogul skiing. The 'Unofficial' Guide to Good Skiing does define the basics of skiing that should be the foundation of movement for all skiers inclusive of recreational skiers, instructors, racers, bumps skiers and extreme free skiers. These mechanical elements do not in themselves make a great Skier. They merely create a foundation for that intangible quality called "touch", the profound connection of the skier with the skis the snow, momentum and the mountain.

A.T.S. Levels 1-9

Through the ITC, candidates will be tested on teaching Levels 1-4

and Skiing Levels 1- 6 Wedge Turns Wedge Christies

Open Parallel skiing, with pole touch, on groomed Blue and Black Terrain

For completeness, this Manual does address all 9 of our PSIA A.T.S. Levels



A.T.S. Level 1 First Time Skier



SKILLS & GOALS

- Boot Drills (See Appendix, page 31), Sensations under foot and at the boot cuff
- > Putting on and taking off the skis
- Athletic stance- weight on the arc of the foot, shin to boot cuff contact; walking- COM- Center of Mass, remaining over base of support, climbing, gliding
- Rotary or pivoting movements, originate from the legs, weight is on the middle of the foot, bullfighter position
- Climbing
 - Herringbone: Tails of the skis are together, tips apart. Knees may tip slightly inward toward the snow to create edge angle enough to stop a backward slide. Ski pole baskets are behind the feet.
 - Side Step: skis are across the hill, and are tipped on corresponding edges, knees tipped slightly up the hill. Step uphill ski with a small step to the little toe side, followed, by a small step of the downhill ski onto the big toe side, note the straight edge marks left in the snow. COM moves up hill to remain over base of support. Ski poles assist in balancing movements.
- > Straight run, skis parallel, feet hip distance apart, athletic stance. Natural run off of the terrain
- Gliding wedge. Both legs and feet are mirror images. Feet, hip distance or just slightly wider, with equal weight on each ski, COM is aligned over base of support, remains between the skis. Feet are pivoted from the middle of the foot to a wedge. Tails are not pushed away from center.
- Wedge turns, ankles remain flexed, the outside knee and hip extend, the COM moves slightly inside, in the direction of the apex of the new turn. The new inside leg shortens, the ski flattens, at the same time, the outside leg is lengthened, weight is transferred to the outside ski. Skier steers both skis, using leg rotation, in a curved arc. When turning to the right, as the outside (L) leg lengthens, & the COM moves in the direction of travel, the new inside(R) ski gets flatter and both skis are guided through the arc of the turn to the right, the ankles remained flexed and lower leg remains in contact with the front of the boot cuff. Upper body remains heading down the hill, a countered relationship develops.
- Wedge turns, ankles remain flexed, the outside knee and hip extend, the COM moves slightly inside, in the direction of the apex of the new turn. The new inside leg shortens, the ski gets flatter, at the same time, the outside leg lengthens, weight is transferred to the outside ski. Skier steers the skis toward the fall line, in a curved arc. When turning left, as the outside (R) leg lengthens, & the COM moves in the direction of travel, the new inside (L) ski flattens and both skis can be guided through the arc of the turn to the left. the ankles remained flexed and lower leg remains in contact with the front of the boot cuff. Upper body remains heading down the hill, a slight countered relationship develops.
- > Linked wedge turns, speed control through turn shape, legs turn more than the upper body
- > Stop by completing your turn. **DO NOT** use of teach a braking wedge
- Ride Ollie's Moving Carpet, or Easy Rider Carpet lift. Instruction on how to get on AND off the lift, & Getting up after a fall (See Appendix, page 32)

- > Riding the Monadnock Express Chair Lift
- > Skiing a variety of turn shapes
- Developing more turn shape for speed control on steeper terrain





A.T.S. Level 2 Beginner Zone Skier



SKILLS & GOALS

- Review athletic stance, wedge turns and *turning* to a controlled stop, take a run on Ollie's to assess skills; advance to Easy Rider if appropriate, with the goal of riding the Monadnock Chair
- Feet remain hip distance or only slightly wider, pivot occurs under the mid foot
- Make linked turns, moving inside half of the body into the turn first. Right ski flattens slightly, through a diagonal directional move of the COM, toward apex of the new turn, to allow the steering of both skis to the right. Left ski flattens slightly, through a slight diagonal directional move toward the apex of the turn, to allow the steering of both skis to the left.
- The lower body, feet and legs, turn more than the upper body, developing a slight countered relationship.
- Link wedge turns using steering movements of both feet and skis to change speed through turn shape.
- You use a variety of turn shapes, short, medium and long radius turns, controlling speed through shaping and guiding of the skis across the fall line and slightly back up hill, to come to a complete controlled stop
- You know how to get on, ride **AND** get off the surface lifts and the Monadnock chair lift. You know where to meet when you get to the top. You are skiing all terrain off these lifts safely and in control
- The instructor follows the entire group to the top
- Mileage, to commit these correct movements into muscle memory
- You understand and live the Safety Responsibility Code
- You can control speed and stop at any time; you are able to maneuver around moving and stationary objects.

- Reinforce turning, guiding both skis through the arc of the turn, slowing and stopping through the use of turn shape or by turning both skis across the fall line and back up the hill.
- Link wedge turns varying turn shape as terrain changes. Flow from turn to turn, without a traverse
- Making wedge turns on a diagonal down the hill, will help with 'steep' issues
- Skis all green trails at Wachusett
- Explore the skidding of the skis to parallel at turn completion



A.T.S. Level 3

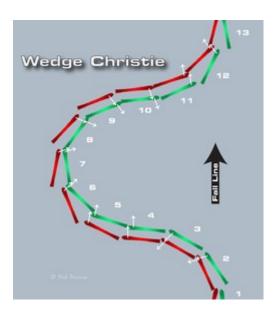


You are moving into the world of the Wedge Christie Beginner Zone Skier

SKILLS & GOALS

- Review riding of the chair lift, take a warm up run on the carpet to assess skills
- Vary speed through turn shape, develop a rhythm linking turns, no traversing, flow from turn to turn
- Make linked turns, moving inside half into the turn first. Through a diagonal directional move of the COM toward the apex of the new turn, the new inside ankle flexes slightly, the leg shortens, and both skis are steered into the turn. Use of directional movements and the shortening of the inside leg, the outside ankle opens, (extends), lengthening the leg, as the weight is transferred early to this new outside ski. Both skis are guided through an arc. Right will flatten slightly to go right, left to go left, because of directional movements toward the new turn
- Legs turn more than the upper body, COM moves across the skis in the direction of the new turn, Legs turn under a stable upper body, creating a slight countered position. Poles aid balance
- Introduce skidding at the end of the turn (early wedge Christie), where the skis will re-align to a parallel position, on or after the fall line. Use of natural terrain features and a slight increase in speed will allow the skis to realign spontaneously at turn completion. Turn shape is used for speed control
- Flexing the ankle of the new inside leg results in a slight tipping of the foot and ski toward the little toe side, allows you to realign the ski to parallel, as you guide it through an arc.
- Feet remain hip distance apart both in wedge AND parallel positions, skis are pivoted under mid foot
- A small wedge, feet are under the body, allowing for easier re-alignment to occur at turn completion
- Perfect practice and Mileage allows you to commit correct movements into muscle memory

- Ski trails off the Monadnock Chair with speed control, skidding the skis to parallel at turn completion
- Pole use for balance and upper body stabilization
- Use terrain features, rolls and mounds, to aid in the success of the Christie
- Movements are fluid and flow from turn to turn without traversing
- Move to the Minuteman Express Lift and Ralph's Run
- Ski all green trails AND easy blue trails at Wachusett



A.T.S. Level 4
Refining the Wedge Christie, work toward earlier re-aligning of the ski
Intermediate Zone Skier

SKILLS & GOALS

- Reduce the size of the wedge to facilitate re-aligning of the skis
- Use of natural terrain changes can provide success
- Feet remain hip distance apart both in wedge AND parallel orientation, there is active steering of both feet into and through the turn, legs turn more than the upper body, developing a slight countered relationship
- Diagonal Directional movements of the COM toward the apex of the new turn, at turn initiation, allows for edge release, the new inside ski flattens and opens into a slight wedge, so that both skis can be steered into and through the turn
- The new outside ski does not gain elevation as skis are opened to a wedge, it is the movement of the COM over the skis in the direction of travel which allows the new inside ski to flatten, and both skis open to a wedge position
- Active guiding of the skis through the arc of the turn along with proper stance, will allow for spontaneously realigning of the skis to a parallel position on or after the fall line
- Re-alignment of the inside ski occurs earlier in the turn. This is facilitated by continued shortening of the inside leg through flexing, and tipping of the ski to the little toe side of the foot while actively steering it to parallel position, the guiding movements occur under mid foot.
- Edging and steering are smooth movements using the legs, not the upper body and are not forced
- Using diagonal directional movements of the COM in the direction of travel and the opening and closing of the ankle joint, allows for accurate pressure control movements as the speed increases
- Perfect practice, feedback and Mileage will help commit correct movements to muscle memory

- Use the Minuteman Express lift, skiing comfortably on Ralph's Run, Hitchcock, and venturing onto Fran's Folly, and Piece of Cake >> Skis all green trails AND groomed blue trails
- Introduction of the pole swing and touch to complement the movement of the body in the direction of travel
- Work on matching earlier in the turn, at or above the 'fall line', movements flow from turn to turn, no traverses



A.T.S. Level 5
Refining the Wedge Christie, re-aligning of the skis above the 'fall' line
Intermediate Zone Skier

SKILLS & GOALS

- Continue active steering of both feet into and through the turn, movements are smooth, flow is down the hill
- Use terrain to facilitate learning, able to realign the skis earlier in the turn, move to a bit steeper blue terrain, use a variety of terrain and snow conditions and turn shapes
- Introduction of the pole swing and touch, complements the movement of the COM toward the new turn, and edge change movements early in the turn
- Diagonal directional movements, pole swing and touch, facilitate edge release for active steering of both skis to a slight wedge at turn initiation and re-alignment of the skis, above the fall line.
- Feet remain hip distance apart in wedge AND parallel positions, lower body, feet and legs, turn more than the upper body; the upper body and the inside half lead into the turn developing a countered relationship
- There is a more apparent long leg, short leg orientation throughout your turns, Which translate into more active movements of the COM in the direction of travel, edge change and PC movements
- Perfect Practice, feedback and Mileage commits correct movements to muscle memory

NEXT LEVEL

- Skiing on steeper Blues of Hitchcock, Frannie's Folly, Look Mom and Challenger, controlling speed through turn shape
- Continuous movement allows flow from turn to turn
- Proper use of pole swing and touch compliment diagonal directional movements of the body, allows both legs to tip the skis and guide them through a parallel turn
- Hockey Stops





A.T.S. Level 6 Beginning Parallel Turns Intermediate Zone Skier



SKILLS & GOALS

- Introduction of open stance parallel, both feet doing the same thing at the same time
- Feet are hip distance apart, both feet are tipped at the same time, focus on moving the inside leg first
- The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body, creating a countered relationship
- Upper lower body separation occurs at the hip socket, not the rib cage, waist or hip/buttocks
- Diagonal directional movement of the Center of Mass toward the apex of the new turn, allows for simultaneous edge release and easy steering/guiding of the skis through the turn.
- Smooth directional pole swing and touch, aid in directional movements, allows for simultaneous tipping of both feet (pole movement and touch moves north/south, while skis move east/west). Pole touch occurs at edge change
- The amount of edge angle is created by the pitch of the hill
- Joints are flexing harmoniously, angles are created through proper stance over the base of support, keeping shoulders and arms parallel to the pitch of the hill. Angle of the knees, hips, and shoulders create a parallel relationship
- Perfect Practice, feedback and Mileage will commit correct movements into muscle memory.

- Uses proper terrain, not venturing too steep, too fast, which will impact learning
- Continued movement and flow from turn to turn in open parallel stance
- Diagonal directional movements of the body promote early inside leg steering and early simultaneous edge engagement
- Proper pole use facilitates turns and stabilizes upper body





A.T.S. Level 7 Introduction to Carving Advanced Zone Skier

SKILL GOALS

- Review balanced stance, diagonal directional movements, complemented by pole swing and touch
- Feet are hip distance apart, both feet and legs are tipped at the same time, inside half moves into the turn first
- The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body, creating a countered relationship between upper and lower body
- Engaging of the ski tips at the top of the turn, above the fall line, will draw you into the new turn
- Tipping of the new inside foot to the little toe side using a directional movement toward the upcoming turn. Inside leg flexes/shortens, outside leg extends/lengthens, allows for simultaneous edge change.
- Long leg, short leg orientation continues to develop. Lateral movement of the pole swing helps draw you into the turn
- Both skis are guided throughout the arc of the turn
- Proper use of the ski design provides for smooth turn entry, carving medium and long radius turns
- Controls speed through turn shape on a variety of terrain and snow conditions.
- Able to ski easy black bumps

NEXT LEVEL

- Able to ski trails off the Polar Express Lift and a variety of snow conditions
- Ski a variety of turn shapes, carved long and medium radius, short fall line turns with effective pole usage
- Rail road track turns on the flats





A.T.S. Level 8 Carve it Up Advanced Zone Skier

SKILL GOALS

- Review balanced stance, directional movements, developing of long leg/short leg orientation, pole swing and touch.
- Distance between the feet and legs change in response to snow conditions and terrain changes (powder,crud,bumps)
- The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body
- Pole swing coincides with extension of the legs, edge change and complements directional movement into the new turn
- Tipping of the new inside foot to the little toe side, flexing and shortening the leg, tipping to the big toe side of the outside ski with extension in the direction of the apex of the new turn, allows for an early edge change
- Directional movement of the center of Mass allows for simultaneous edge release and engagement
- Engaging of the ski tips at the top of the turn draws you into the new turn, this is facilitated by active movements of the COM in the direction of travel
- Both skis are guided throughout the arc of the turn. Active inside leg steering complements steering of the outside leg, Long leg/ short leg orientation is apparent
- Proper use of the ski design provides for smooth turn entry, carving initiation, control phase and finish
- Uses variety of turn sizes and shapes, skis bumps, crud and powder
- Lower leg remains in contact with boot cuff at the 2 and 10 o'clock position

NEXT LEVEL

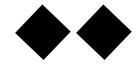
- Able to carve medium and long radius turns with minimal skidding. Fall line, short radius turns with effective pole usage. Ability to change the size and shape of the turns as terrain dictates, with greater accuracy
- Rail road track turns with continued shaping toward short radius carved turns
- Skis a wide variety of snow conditions
- Able to modify skill blend with pivoting and skidding for speed control in moguls, Rebound, retraction turns

Shows continuous flow and movement from turn to turn





A.T.S. Level 9 Mountain Mastery Advanced Zone Skier



SKILL GOALS

- Improvement of balance, agility and versatility with changing of conditions and terrain
- Maintain dynamic balance through the creating of angles of the ankles, knees, hips and spine
- Distance between the feet and legs change in response to snow and terrain changes (powder,crud,bumps)
- The upper body and the inside half lead into the turn, the feet and legs turn more than the upper body
- Efficient directional movement of the COM allows for simultaneous edge change
- Maintain a strong core and strong inside half, active flexion and extension, simultaneous leg movements, early weight transfer, accurate use of ski design allows tipping to the new set of edges above the fall line
- Active guidance of both inside and outside skis
- Edging movements are more precise, reducing the occurrence of skidding, except when tactically appropriate for speed control
- Rotary movements are accurate and appropriately applied as terrain and conditions dictate.
- Proper use of the ski design provides for smooth turn entry, carving control phase and finish
- Uses variety of turn sizes and shapes, skis bumps, crud and powder
- Pressure control movements through active flexion and extension, are accurately applied for smooth turn to turn seamless transitions and controlled arc.
- Momentum is carried from turn to turn
- Dynamic short radius turns
- Good speed control in the bumps

Black Diamond Expert

- Able to ski most terrain, in most conditions at any time
- The mountain master.



Children Our Future...Our Success

Children are people too, but they are **not** just small adults. They present us with variables which force us to modify our teaching tactics and expectations for success. Our goals with children are no different from adults; Safety, Fun and Learning.

To determine a child's ability and potential at different ages, we use information from our **CAP Model**. '**C**', cognitive, how children think and process information. '**A**', Affective, how children feel about themselves and how they interact with others. '**P**', physical, how children move. As with anything that is learned, the ages stated are just guides, each child will pass through the stages of development, some faster than others depending upon their activities, socialization and environment.

When teaching children first think of your INTRO

I-Introduce yourself to the child and children to each other in the group. Get down to their level, eye to eye.

N-Notice clothing, is it temperature and weather appropriate (hats, mitts, goggles, neck warmer, boots)

T-Tell the children the plan for the day. Ski, break with teddy grahams and hot cocoa, ski, have fun, make new friends etc **R**-Go over the safety Rules, Stay in class, assign buddies, and keep an eye on them, Listen to your instructor. For the older children, respect space and others.

O- Open the class with a group activity so everyone gets to know everyone else. Hi, my name is Sam, I like Snow! Using this simple process, you start to build trust, a very important factor in the learning partnership.



Teaching Model as it Applies to Children

PDAS: P-Play, D-Drill, A- Adventure and S- Summary

The modification of the adult model, allows us to assess the child's abilities and movement patterns through **Play**. We present **Drills** in the form of games. Long technical explanations are meaningless to this age group. Children are **visual**, they learn by watching, mimicking and doing. We provide time for practice through **Adventure**...mileage, exploring a variety of turn shapes and terrain features that will help develop dynamic balance and develop proper muscle memory. Complete the cycle with a **Summary** of where we started, what was accomplished, and how the parent/guardian can reinforce the accomplishments of the child safely..

Table 2.1: The CAP Model and General Traits by Stage of Development

Age	0-2 years old	3-6 years old
Co	ognitive: How children think and perc	cive
THE RESIDENCE OF THE PARTY OF T	Sensorimotor	Pre-Operational
Characteristics	Aware of sensory stimuli	Language use is beginning. Is egocentric ("Me"). Can only process one thing at a time. Unable to reverse directions. Learns through play and use of fantasy. Has a short attention span.
Point-of-View	Eats snow	"Look at ME!" "Your space is MY space." Prefers to tackle one thing at a time. Doesn't think in concrete concepts. "I can get there, but not back." Doesn't know why things are the way they are.
Affective: How shild	ren react and socialize, process emo	tions, and communicate
Play/Humor	Plays alone. Tests abilities. Plays "Peek-a-boo."	May play beside (not with) each other. Learns through play. Social play with few rules. Slapstick and basic silliness
		Pre-Conventional
Morals/Social	"In my own world."	Pleases others (to avoid punishment). Thinks "good is good, bad is bad." May ask, "What's in it for me? May want their mom or dad. May need reassurance.
Physical: How ch	ildren's bodies are built, how they go they develop motor skills and coordi	ow and move, and how nation
Growth & Physical Development	Large head in proportion to their body. Higher center of mass. Body moves as a unit	

7-11 years old	12-13 years old	Teens+
Gogi	nitive: How children think and perce	live
Concrete Operational	Formal Op	erational
Sees the world from more than one point-of-view. Can process more than one task at a time. Appearance vs. Reality. Starting to judge space, distance, and time. Directionality & Reversibility. Over-estimates abilities.	Abstract thinking is developing. Is starting to visualize. Peer acceptance is important. Over-estimates abilities.	Uses problem-solving skills.
Look at USI "Your space is YOUR space." Considers "What it?" Is ready for multiple directions. "I can get there and find my way back." Wants to know why things are the way they are.	Wants to know why things are the way they are and can understand the reasons why. Can visualize well.	 "I am like others." Distinguishes right from wrong Can think in abstract terms and understand complex concepts."
Affective: How children	react and socialize, process emoti	ons, and communicate
Cooperative play. Social play with rules. Wants to have fun and play games. Seeks approval. Likes "Knock-knock" jokes and "toilet" talk.	Competition: Wants to compare their achievements to their peers'. Asserting independence. Parody and sarcasm.	 Can laugh at themselves. Not keen on competition because they prefer to blend in with their poer group.
Conventional	Post-Conventional	
May think they're "clever as a fox" (cognitive conceit). Seeks consensus ("All in favor say "Aye.") Is developing awareness of others' feelings. Likes to know when they've done something well.	Tests authority. 'Fitting in' is important Self-esteem is important: Wants to be treated with respect and not talked down to.	Listen to their conscience. Seeks peer acceptance. Understands universal ethics.
Physical: How childs the	en's bodies are built, how they groy y develop motor skills and coordina	a and move, and how Gion
Center of mass is moving lower, toward the core. Strength and coordination may not match growth. Motor skills developing: Gross More than Fine (Manipulative). Beginning to develop arm/leg movement independence.	Rapid growth and body changes. Strength and coordination may not match growth. Planes of motion start to change: Fore/Aft More than Lateral/Diagonal. Can move body parts independently of one another.	Growing into an adult body.

Application and Understanding of the CAP Model Ages 0-2: Keep activities skill specific. Use the Carpet lifts whenever possible in the terrain garden to avoid the expending of energy in climbing. Use short and frequent activity periods, perhaps 10 minutes, then rest. Since their COM is higher than an adult, frequent falling results. Try to make the child understand that falling is a natural part of learning and is 'OK'. Recognize the physical limitations of this age, allow them to work with a wider stance. Use activities to develop balance. As muscles develop and become stronger, stance will improve. At this age, the easiest skill to develop is edging because it is easier to move side to side, than fore/aft. You must demonstrate, and help move the body parts into the position you want them to be in. At this age Kids cannot mirror, stand beside them to demonstrate. Give simple, single directions and Correct Demonstrations.

Emphasize to the parents that at this age, the successes are in making new friends, enjoying the snow, surviving without the parents in sight and without a nap! Each child will react differently depending on their socialization, do they separate well from the parents, are they in pre-school, how do they react to unfamiliar environments? Each of these variables will impact what is accomplished in the course of the lesson. IF you inform the parents at the outset of the lessons, what the expectations are for this age group, disappointment is minimal!

Regardless of the child's age, we want proper and correct movement patterns, so that when they reach the physical ability to achieve these movements, the correct information has already been presented. Provide accurate demonstrations for children to follow and copy. The attention span of children is just about their age in minutes. If you can engage a child in a fun activity, like skiing, you may be able to expand the attention time to 2-5 times their age. The important word in this statement is FUN, keep kids moving, reinforce efficient movements, use activities which will build and anchor accurate movements. Children learn by watching and doing. Develop dynamic balance, pressure managing movements, edging movements and rotary skills by doing something as simple as taking a couple of steps up hill at turn transition, take a couple of steps down hill, hop, skip and find jumps. This is all part of Play and Adventure for skill development. You cannot lecture children but you can expose them to activities that will develop skills.

3-6 year old: Pre-Operational Kindergarten, 1st and 2nd grades

- Egocentric-the world is created for me!
- Can focus on a single object or event at a time
- Does not understand cause and effect
- Doesn't understand rules or competition

APPLYING THE TEACHING MODEL TO THE CAP MODEL

	APPLITING THE TEACHING MODEL TO THE CAP MODEL		
Children 3-6 I want to have a good time		Instructor Behavior Let them feel fun immediately	
I need structure	PLAY	Set ground rules	
I have a short attention span	Introducing learning	Keep the group moving	
I don't process too much info		Repeat simple directions	
I want to be successful		Smallest accomplishments are HUGE	
I like to do and see	DRILL	Minimal talking is best	
I copy and mimic well	Determine goals	Use demonstrations frequently	
I want constant movement	Presenting information	Use interactive activities	
I have an active imagination		Be creative with fantasy	
I do not need to be perfect		Encourage variety	
I need to change tasks often	ADVENTURE	Use many activities for one skill	
I need to feel safe	Practicing	Set guidelines and boundaries	
I show you that I understand	Check for understanding	Watch how they perform	
I need lots of guidance		Give individual attention	
I tire easily		Take frequent breaks	
I like personal attention	SUMMARY	Point out my best moves	
I need help remembering	Summarize the lesson	Tell me what I did during the day	
I only remember 1 or 2 things		Speak with my parents	

7-12 year old: Concrete Operations

- Plays cooperatively, understand rules, but likes 'internal' competition (Do better next run down)
- Differentiates reality from fantasy
- Acts first, deals with consequences later, and are able to imagine

APPLYING THE TEACHING MODEL TO THE CAP MODEL

Children 8-12 **Instructor Behavior**

I want a coach, not a teacher Create a sense of team **PLAY** I want ownership of my day Let the group make decisions I want to be part of the group Introduce learning Be inclusive I like the process better than goals Emphasize activities

I do not want not be the worst one Focus on group success DRILL Keep all involved in the lesson I like to be responsible for learning I need to know WHY Determine goals Provide rationale Presenting information I want to be challenged and successful Highlight positive changes

I will repeat tasks Provide lots of practice time I like to work independently **ADVENTURE** Vary teaching styles I will ask questions Encourage guestions Practicing I like to know when I do well Check for understanding Give positive feedback

I will remember highlights of the day Remind the group of lesson I compare myself to my peers Help me fit in SUMMARY I need to be reminded of what I learned Summarize the lesson Relate skills to the experience

13-18Year old: Formal Operations (Teen-Adult)

Can hypothesize and consider what might be rather than only what is experienced. Think in abstractions and concepts vs concrete even

Teens I want to have fun with my friends I feel self-conscious I like being treated as an adult	PLAY Introducing learning Assess the student	Instructor Behavior Create a team atmosphere Do not dwell on abilities Involve me in decisions
I understand abstract things I like problem solving I am sensitive and emotional	DRILL Determine goals Presenting information	Use explanations and details Give specific reasons Be tactful and cautious
I am becoming more confident I like to test my limits My body keeps changing	ADVENTURE Practicing Check for understanding Be patient	Allow for exploration Avoid unsafe situations
I am easily embarrassed I like feedback I am mature	SUMMARY Summarize the lesson	Speak candidly Encourage, be positive

Remember when teaching children, they have been in school all week long, do not make your lesson another 'classroom'! Keep things moving, **teach**, through your demonstrations and mileage. Use terrain to create the experience for learning to take place, do not lecture.

Appendix

Preparation of your Class for Level 1 Boot Drills

An important part of skill development for skiing is the introduction of movements that you will need when you do put your skis on to ski, these are Boot drills. These take only a few minutes, but they are an important part of skill development and may also show you the potential difficulties in movements that occur, once the student is on skis.

Purpose is to isolate, teach and reinforce movements needed when skis are on!!!

- Stand with feet hip distance apart, (hop off snow and land, this is where you stand) start walking ahead in a straight line. Do not walk heel to toe, but make sure your entire boot print is flat in the snow. This means you must move your jacket zipper (your COM) with your feet! STOMP
- Stand flat again, then pivot your foot, using a rotary movement out of the hip socket. Pivot point in under the middle of the foot, making bow tie marks or hourglass marks, in the snow! Comment that when the tips of the skis are pivoted toward each other, and the tails further apart, this is the Wedge position they will use skiing, as well as the bullfighter position they will need when on the hill. When the tails are pivoted close together and the tips further apart, this is the 'herringbone position they will need for climbing! Use a pole grip pivot, or toe piece pivot demo to reinforce rotary movements are from the middle of the foot and from the leg moving in the hip socket, not arms, shoulders, hips.\or head.
- Give a visual: Take skis off, standing on a slight pitch, draw 2 lines in the snow with your ski poles, toward the middle of your ski boot toes. Draw a transecting line in the middle. Step your mid foot where the lines crosse. Now take small steps moving toes to the left. Left inside thigh should be open and heading down hill. Repeat to the right. Good focus for upper lower body separation, Upper body remains quiet, legs turn!
- Walk in a circle, focus us walking clockwise, right little toe turns into the middle of the circle, left big toe follow. counterclockwise, your left little toe points to the middle of the circle, right big toe follows. Understand that to turn, the leg is rotated in the hip socket. The jacket zipper is still moving over the feet
- Stand with feet hip distance apart, make a couple of steps to the left and right, moving each foot only 6-8 inches with each step. Keep feet parallel and make a flat total boot print in the snow. COM moves over the feet.
- Stand with both feet flat, tip your feet, side to side. The leg is rotated in the hip socket, the body does not lean to create the edge in the snow, the COM moves slightly to remain over the feet. Step in both directions, little toe side then big toe side of the foot.
- On a slight incline take a small step up hill, step first to little toe side of the foot, COM moves with the stepped foot, note the other boot has now moved to the big toe side and has created an 'edge' mark in the snow. Continue a few steps up hill, turn around and repeat. COM has to move to remain over the foot. Note you now have created 2 edge marks in the snow, not flat boot marks.
- To create an even greater edge angle in the snow, tip the feet and knees uphill. Step up and down the hill, repeat in both directions. Marks in the snow should be more of a line of the big toe and little toe sides of the boot.
- ※ You extend off the outside/downhill leg, and move to the inside/uphill leg. You move from long leg to short leg!

Getting up from a Fall:

Teach at least 2 ways to get up from fall. If no one in the group has fallen during the class, before you dismiss them from the lesson, explain to them and show them how to get up. You can do this with or without removing a ski.

Examples:

→ **Belly Roll Method**-great for youngsters!

- → Place skis across the fall line with tips in the same direction, move your butt so that you are sitting above your skis. Now walk your hands toward your ski tips at the same time as you push your butt toward the sky...very lady like!
- → Another sitting method: Place skis across the fall line, hold your poles using one hand just above the baskets and the other on the grips. Dig the pole tips into the snow for support, lean slightly forward and push yourself up with your hand that is close to the baskets, use the hand at the top of additional lift and support.
- → Remove a single ski
- → Remove both skis



Riding the Lift

When guests are able to turn right, left, control speed through turn shape and come to a controlled stop, they are ready to ride the surface lifts, Ollie's or Easy Rider. This is where you reinforce the skills just learned on a flatter terrain.

Provide a detailed explanation of getting on **and off** the lift and where to meet at the top. Choose a permanent feature that will not be moved for grooming. Our carpet lifts are similar to the people movers at an airport, or a conveyor belt at the grocery store, that takes you up an incline. You **ALWAYS** follow your class up the lift to make sure everyone loads and unloads safely and that you have not left any one behind.

- Instruct your group where to meet at the top of the lift
- Shuffle up to the carpet, lining the tips of skis/board with the center of the moving belt
- Move slightly forward so that the belt engages the tips and you move uphill, keep shins in contact with the boot cuff
- If you are carrying poles, keep them off the carpet so they do not trigger the safety stop at the top
- At the top of the lift, there will be a sign 'Unload Here'. With your poles still off the carpet, shuffle forward onto the snow
- Wait until that person in front of you reaches the orange cone or sign before you move onto the carpet
- If the lift should stop, remain standing in place, do not walk up the carpet, or move from the belt unless instructed to do so, listen for the buzzer which tells you the carpet will be restarting.

Riding your first Chair Lift, the Monadnock Express

Give a detailed explanation of getting on and off the lift and where to meet at the top, to regroup, before continuing down the hill in a group. You **ALWAYS** allow your class to load ahead of you, you are in the last chair with the remaining students, to guarantee everyone safely loads and exits the lift, you remain as a group.

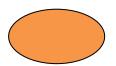
- Remove pole straps from your wrists and hold poles in one hand, preferably your inside hand. (Outside hand is free to reach for the armrest of the lift)
- Shuffle through the coral area to the loading gate where you will line up in fours
- It may be helpful to tell the children the chair number they will be sitting in.
- When a chair passes in front of you, shuffle forward to the 'Load Here' sign or red tiles in the snow
- Keep your poles in your inside hand
- Glance over your shoulder, watch the approaching chair. As the chair advances and touches the back of your legs, sit.
- Now looking up the hill, wait until your skis clear the snow, reach behind you and pull the safety bar forward.
- If there is a footrest, you can rest your skis for the ride to the top
- At the top, you will see the lift hut. Just prior, there is a sign stating 'Prepare to Unload, Raise the Safety Bar'
- Remove your feet from the rest and raise the bar.

- Allow the ground to come up under your feet before you stand from the chair and glide down the incline to meet at the designated spot
- If the chair lift should stop while you are riding it, sit quietly, do not swing or rock the chair, do not attempt to get off the lift! Enjoy the view! The chair will restart shortly.
- FOR YOUNG CHILDREN: Have the smallest/youngest child load the lift closest to the attendant, so they can assist if need be. Have the child place hands on knees, so they are bent forward and do not push back and off the seat. Have them grab the arm rest to aid in pushing self back against the back of the chair. Another idea for small children is to have the safety bar rest on the seat between the child's legs, so there is no way the child can wiggle off the chair. You can ask other instructors, other adults to help with a child who is unfamiliar with riding the lift.

Your Responsibility Code

There are elements of risk with skiing and riding that common sense and personal awareness can help reduce. Below is only a partial list, again use common sense!

- Ski in Control
- When **O**vertaking another skier, you must avoid them
- When stopping on a trail, do so where you are **V**isible
- When Entering a trail, look up hill, yield to others
- Skiers must have devices on equipment to prevent Runaway skis
- Observe all posted Signs
- Prior to riding a lift, you must know how to do so Safely
- Have the skills to safely ski and ride the terrain serviced by the lift you are riding!
- Do not use lifts or terrain when impaired by alcohol or drugs
- If involved in an accident, share contact info



FREESTYLE TERRAIN SYMBOL (Orange Oval)

Just like we do with the Green, Blue, and Black trail symbols to signify the degree of difficulty of the terrain, the orange oval (jelly bean) symbol represents "Freestyle Terrain" and will collectively refer to half pipes, terrain parks and terrain features. Prior to using any feature, it is your RESPONSIBILITY to familiarize yourself with all instructions and warnings. At Wachusett Mountain you must view the safety video and have a park pass to enter the park. Ski classes are **not** routinely allowed in the park on Hitchcock.

LOOK BEFORE YOU LEAP: Scope around the jumps first, not over them. Know your landings are clear and clear yourself out of the landing area. It is best to have a spotter to make sure the landing remains clear when you are ready to jump. **INSPECT!** All terrain changes daily due to weather, grooming and use. The spine you hit two days ago may be totally different today. Do yourself a favor - inspect it before you go big.

EASY STYLE IT: Start small and work your way up (Inverted aerials not recommended).

RESPECT GETS RESPECT: From the lift line through the park, respect everyone and they'll respect you. It's not about what you ride or ski, where you ride or how good you are. It's about having fun, doing your own thing, and keeping it safe for everyone. **PAY ATTENTION:** Keep an eye out for signs.

SKI & RIDE AT YOUR ABILITY LEVEL

Know and Live the Code

It is your Responsibility

Drills and Games for Children

Boot Drills: walk/run through an obstacle course, play Duck, duck, Goose. This gets them used to the heavy feeling of the boots on the feet. Walk like a pigeon (toes pointing in), walk like a duck (toes pointing out). Walk, shuffle, hop, walk like a crab, sideways. Walk around different color balls or cones, turn right around red cone turn left around Yellow cone. Use colored duct tape on boots that correspond with the colors of the cones (Gumball Game). Helping to develop rotary and movements needed when on skis

Candy Cane Turns: Make 'J' turns with varying 'hooks'

Animal Hunt: Go on an animal hunt, ski from tree edge to tree edge looking for creatures. Use terrain variations to build stories around creatures you may find hiding below the mounds and rolls. (Mileage)

Songs: Use actions like 'head shoulders knees and toes, knees and toes. This may help to get the child to stand independently and erect without your support, learn opening and closing of the ankle joint.

Peanut butter and jelly turns: one ski is peanut butter, one is jelly, you smear one onto bread, then you smear the other. These children do not understand left and right, peanut butter and jelly may work better.

Bert and Ernie: These guys live on the boot cuff, hug them by keeping your lower legs against the cuff. (Stance)

Green light/Yellow light: using the wedge of varying sizes, give the command to GO green light and yellow means you travel very slow, slowing down by shaping turns. Use your RED stop light, only after finishing a turn, across the hill.

Space Ship Docking Station: Most kids understand puzzle pieces. Use your skis, in a wedge, either forward or backward, your skis are the docking station, theirs has to maintain a wedge, to put their space ship into the docking station, like a puzzle piece.

Giraffes and Gorillas: While making turns, your start tall a giraffe and at turn completion, you ski small like a gorilla. This encourages appropriate body position through turns. (Pressure managing)

Dolphin Turns: Dolphins come in and out of the water as they swim. At turn initiation the dolphin will come out of the water, at turn completion the dolphin goes back into the water. This movement develops the opening and closing of the joints, allows the skis to release edges so they can be guided through the arc of a turn.9Pressure Managing)

Follow the Leader: Do what I do, where I do it. Follow in the same track ski over bumps and jumps, use the terrain to help develop balance and skills

Shadows: Have each child ski on the outside of the ski track you created in the snow, this allows for more turn shape and ultimate speed control

Take a step: At turn transition, take a couple of steps up the hill, take a couple of steps down the hill. This builds balance, they have to be centered to be able to lift the skis and step them off the ground. Add a little challenge by hopping, **Kangaroos Hops** or **Trampoline Jumps** this will achieve the same thing (Balance, PM)

Ski like an animal: Have each child choose an animal and one by one, try to ski like them. Ski tall like a giraffe, ski small like a mouse, ski fast like a deer, ski slow like a turtle. Each child picks an animal, you create the game and the learning adventure. Add another dimension and have the children make the sounds of the animals they choose.

Ski different shapes of fruit: Ski round like an apple, ski back up hill like a banana, ski short radius like a bunch of grapes, ski long radius like a watermelon.

Magic Marker turns: Picture using the flat side of the magic marker to make a thick heavy line on paper, explain that the ski on the outside of the turn will make a heavy line, the ski on the inside of the turn makes a light finer line in the snow. Change it up by using colors, Purple/lavender, Red/pink etc. (PM)

Tick Tock Grandfather Clock: Skis parallel have the kids tip their knees and skis from one side to the other like the pendulum of a grandfather clock. Have the kids place hands on knees while doing this. Now go to a shallow slope and tip legs side to side to create small turns. (E)

Slippers and Skate Turns: Make turns down the hill with a very low edge angle, allowing the skis to slip, now repeat using higher edge angles so the skis carve through the turns(E)

Glossary

5 T's and an S: A way to remember important variables when teaching a lesson. Timing, Traffic, Task, Terrain, Tactics and Surface.

Angulation: Laterally tipping and flexing parts of the body more than others to form angles between body segments and ski/snow interface

Apex of a turn: the portion of the turn occurring in the fall line or during the shaping phase of a turn.

ATS: Acronym for the **A**merican **T**eaching **S**ystem which are the models, methods and philosophy of teaching skiing as collected, developed and disseminated by PSIA, the Professional Ski Instructors of America

Athletic Stance: Position where your joints are harmoniously flexing and supple, shins are in contact with front of the boot, your hips are centered over the middle of your feet, lower back and shoulders are slightly rounded, nose over toes. Elbows flexed, ahead of rib cage, hands forward and in your peripheral vision.

Auditory: Type of learner who best processes information verbally and cognitively.

Balance: State of equilibrium. Dynamic balance is equilibrium in motion. When referring to skiing, it is the ability to affect a change using any skill, with either leg, at any time during a turn.

BERP: Acronym used in skiing for the 4 basic skills, Balance, Rotary, Edging and Pressure Managing Movements

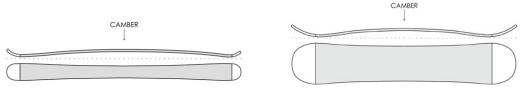
Boot Drills (Foot Drills): Movement on snow in boots, to introduce and reinforce movements that will be used with skis on.

Braking Wedge: A safety stop which is rarely used and one we DO NOT TEACH to guests. It is a very large wedge that *may* help slow a skier, but is rarely used except when entering a lift coral maze, or when skiing in extremely steep narrow terrain where turning is a virtual impossibility.

Bullfighter position: A method of holding one's position on a pitch from moving forward, your legs are in a wedge position and your hands are on top of you poles with elbows locked to prevent a forward motion until you are ready to descend the hill. One pole is planted below the tip of your ski, the other below the tail of the ski. You then take small steps progressively moving your ski tips into the fall line.

"C" Turn: This is a complete turn starting from initiation, through the shaping or control phase through to the finish of a turn.

Camber: The arch formed when you lay a ski/snowboard on a flat surface, the middle of the ski/snowboard is higher than where the tip and the tail contact the flat surface



CAP Model: A model that breaks down development into 3 understandable components. **C**ognitive-how people think and perceive. **A**ffective- how people react, interact and socialize, and **P**hysical- how we grow and learn to move.

Center of Mass (COM): The area of the body around the waist and hip area, This body part moves across the skis in the direction of travel at turn initiation., so that we remain balanced fore/aft and laterally over our moving skis.

Christie: A forward and lateral skidding of the skis. Skis skid on corresponding edges

Corresponding edges: This refers to using the inner edge of one ski and the outer edge of the other ski. Most often seen in parallel position. One ski is on big toe side of the foot, the other on the little toe side.

Countered position: A position in skiing where one body part is facing the opposite way of another. We typically refer to this relationship where the lower body turns against or in opposition to the upper body. Upper lower body separation occurs at the hip socket. A countered stance is where the inside half of the body leads the outside half through a turn, a natural stance when traversing a slope. A countered position develops through the course of a turn, the lower body turns more than upper body.

"COVERS": Acronym used to help us remember the responsibility code with new additions

- Ski in Control
- When Overtaking another skier, you must avoid them
- When stopping on a trail, do so where you are **V**isible
- When Entering a trail, look up hill, yield to others
- Skiers must have devices on equipment to prevent Runaway skis
- Observe all posted Signs
- Prior to riding a lift, you must know how to do so Safely
- Do not ski or ride impaired by drugs or alcohol
- If involved in an accident. Share Contact Info

COM: Center of Mass. This is the area of the body around the waist and hip area, important in moving directionally through the turn, so that we remain balanced fore/aft and laterally over our moving skis.

De-camber: Camber is the natural arch that is designed into a ski. To de-camber a ski means to bend the ski enough that the camber momentarily disappears, such as results from flexing the ski through the arc of a turn.

Diagonal Directional Movements: Active movements involving each part of our body such that we keep up with the speed of our skis. Tipping of the feet, lower legs, and thighs, movement of the center of mass, entire inside half of the body toward the apex of the new turn.

Directionality: Understanding the concept of another person's right and left (Begins ages 7-11)

Drill: Task or exercise that highlights a particular movement, or a focus to help build a particular skill.

Edging movement: Tipping movements of lower legs that increase and decrease the angle of the skis against the snow surface. This tipping is most efficient when done with the legs and not the upper body.

Exercises: Situations and tasks to break down and isolate certain movements or skills, for reinforcement and development. Exercises are often combined in a progression starting with the simplest step and building to a complete task. (Example: Using a fan progression and 'J' turns to refine turning in a single direction from the fall line)

Extension: Any movement that increases (opens) the angle at a joint. At times throughout a turn (initiation of a turn) a skier will open the outside ankle, knee and hip joints simultaneously, extension of the outside allows the inside leg to flex, to flatten and lighten the ski, so that a direction change may be accomplished.

Fall Line: The path which a ball would take if you let it roll down a slope, the path of least resistance, the 'gravity line', the 'flow' line.

Fan Progression: A teaching technique where your drills are started outside or off of the fall line and with each step, you move the same drill into and through the fall line. If you look at the tracks in the snow, they form a fan type pattern. This allows for skill development in the most tentative of skiers to learn movements, not heading directly down the hill. (Example: Working on turn development in a wedge. Start off the fall line with a 'lazy 'J", there is no direction change. With each repetitive step, you move until you start in the fall line, with a 'J' turn, and ultimately end in a full 'C' turn.)



Feedback: Offering a professional opinion that presents an expert point of view. Should be descriptive, positive, specific, relevant and well timed for learning to occur.

Flattening of a ski: This is a movement referred to when turning or tipping the ski during turn initiation. When in a wedge, you are on your big toe side of your foot, you flatten the ski against the snow by tipping toward the little toe side of the foot slightly. This movement reduces the edge angle of the ski in the snow and allows you now to steer the ski in the direction you want to go. In parallel, the tipping of both skis allows for a transitional flattening and tipping to the new set of edges.

Flateraly: A made up term which explains what happens to the new inside ski as our bodies move in the direction of our new turn. The skis flatten through a lateral movement, so they can be tipped to new edges and steered through an arc.

Flexion: Any movement that decrease, or closes the angle of a joint. This involves, ankles, knees, and hips. Inside ankle closes, as the COM moves over the ski in the direction of the upcoming turn.

Gliding: A forward sliding of the skis either directly down the hill or through a turn.

Herringbone: A stance where the tails of your skis are angled close together and the tips are wider apart. You are on the big toe edge of your foot. This position is used for walking up hill.

Inside Half: This is referencing the half of the body that will enter into a turn first, in order to remain in a balanced, stacked position over the skis. The right half of the body enters into a **right** turn first. The left half of the body enters into a turn **left** first.

"J" turn: A drill to develop the skill of turning, and refining the finish of the turn. This is not a complete turn because there is really no direction change.

JL Poem on snow Conditions: If it's gray, stay away; if it's brown, go around, if it's white, it's all right.

Kids Responsibility Code-Teaching Children Snowsports 2021:

Responsibility Code for Kids

- 1. Always be able to stop or stay in control.
- 2. Leave room between yourself and other people when skiing or riding.
- 3. Stop on the side of the run, where others can see you.
- 4. When starting from a stop, or wherever trails meet, look uphill. Let other people go first.
- 5. Don't let your skis or snowboard slide away from you.
- 6. Obey all signs. Don't go under ropes or into areas that are closed.
- 7. Be careful on the lift. Sit down. Sit back. Sit still. Ask for help if you need it.

Laterality: Understanding of left and right, and the possibility of preference of right or left handedness. An internal awareness of the position of right and left with regard to the middle of the body.

Lateral Learning: Helping students gain ownership and understanding by exploring and experimenting with their existing skills (gained from other sports and activities) rather than introducing new skills.

Long Leg: There is always and lengthening and a shortening of the legs through every turn. As you move your COM in the direction of the upcoming turn, your new outside leg lengthens, and weight is transferred to the new outside ski. In a wedge turn, this allows you to guide the ski through the arc, in a parallel turn, the ski is tipped to the new edge allowing you to arc through the turn.

Opposing Edges: Term used when you are on opposite edges of your skis, that is both inner, or big toe side edges, or both outer edges, or little toe side edges. Opposing edges best explains the wedge position.

Phases of a Turn: Initiation, the beginning, edge change and weight transfer occur. Shaping, the speed control phase, the guiding of the skis through an arc. Finish, the completion of the turn, skis are across the fall line, preparation for the next turn begins. An important concept in movement analysis, what is happening at each segment of the turn.

Pressure Managing Movements: Movements that may affect the pressure on the skis, it is one of the 4 basic skills of skiing. Pressure is managed through flexion and extension movements of the legs, or movements from foot to foot. These movements allow us to control the pressures exerted on the skis through the course of a turn, allows us to be better able to control the direction of the skis' movements. **PRESSURE IS NOT APPLIED** to the ski; it is managed through these flexing and extending movements.

PDAS: Acronym developed to remember the steps in the Children's Teaching Model. **Play** is used to determine the abilities of the children so you can see skills and movements the children 'own'. **Drill** is for the games and exercises we use to develop effective movement patterns. **Adventure** is the guided practice, checking for understanding, and providing feedback. **Summary**...says it all, review with the child what they did, what they accomplished, get the parent involved so they can continue to reinforce proper movement patterns.

Responsibility Code: Code of skiing and riding conduct when on the hill

Ski in **C**ontrol

When **O**vertaking another skier, you must avoid them

When stopping on a trail, do so where you are **V**isible

When Entering a trail, look up hill, yield to others

Skiers must have devices on equipment to prevent Runaway skis

Observe all posted Signs

Prior to riding a lift, you must know how to do so Safely

Have the Skills to safely ski and ride the terrain serviced by the lift you are riding!

Rocker: Reverse camber, or the camber is turned upside down. All skis and snowboards when tipped on edge, and stood against, reverse camber. With the 'reverse camber'/rocker technology, the tip and tail will tend to float over the snow, making turn initiation easier



Rotary: One of the 4 basic skills in skiing. It is the steering, guiding, twisting, and/or turning of the legs, feet and skis, so we can change direction. Rotary movements start at the feet, but occur because our hip is a ball and socket joint! "S" Turns: A complete turn to the right and the left.

Short Leg: There is always and lengthening and a shortening of the legs through every turn. The new inside leg joints flex, allowing the leg to shorten; allow the ski to flatten so it can be steered in a wedge turn, or tipped to the new edge in a parallel turn. The shortening occurs as the COM moves in the direction of the apex of the new turn.

Side cut: Refers to the hour glass shape of a ski. The ski is usually wider at the tip and tail, and narrower at the waist. This shape allows the ski to turn more easily when placed on its edge. The side cut also determines the radius that the ski is designed to make.

Sidestep: A method of moving up the hill. While skis are across the hill, a skier steps sideways up the hill, one ski at a time. To avoid sliding back down the hill, it is important to tip your feet and legs into the hill, creating an edge angle in the snow, which reduces the chance of slipping down the hill.

Skidding: A combination of sliding and slipping as the skis move forward in a turn. A 'Christie", a forward and lateral movement of the skis.

Sliding: Forward movement of the skis.

Slipping: Movement of the skis sideways.

SNIRT: An amalgamation of Snow and Dirt

Station teaching: A teaching method which allow you to instruct large numbers of people with few instructors. This is for Level 1 & 2 only, it allows customers to move through stages at their own pace based on skill levels.

TID bit: Acronym for Timing, Intensity and Duration which refer to the blending of the skills.

VAK: Acronym used for the basic 3 learning styles, **V**isual, **A**uditory and **K**inesthetic learners. Visual learners, learn best through watching and seeing. Auditory learners must hear an explanation, and Kinesthetic must be involved physically, and understand sensations they are feeling.

"Z" Turns: The shape of a turn seen when there is an exaggeration of pressure applied to the skis abruptly in an attempt to turn the skis. It causes an aggressive and abrupt sideways movement of the skis forming a 'Z" type track in the snow.

Wachusett Mountain ITC Score Card 23-24 Season

Topic	Score	Comments	
Free Skiing (Skiing Fundamentals)			
Demonstrations (Fundamentals & Tech)			
MA & Analysis (Fundamentals & Tech)			
Teaching/Class Handling (Teach)			
People Skills (Develop Trust)			
Professionalism (Behavior, Potential, Attitude)			
Scoring: 1. Essential elements were not observed or not present. level.	4. Esse	4. Essential elements appear regularly at a satisfactory	
2. Essential elements are beginning to appear. level.	5. Esse	5. Essential elements appear frequently, above required	
3. Essential elements appear, but not with consistency level.	6. Esse	6. Essential elements appear continuously, at a superior	

WACHUSETT MOUNTAIN SKIING LEVELS

LEVEL 1: First time, you have never skied before

- 🏂 You will explore balance in your ski boots, work on movements needed for skiing
- You will be able to get your skis on and off. Your body remains over the middle of the foot, for accurate guiding of the skis, legs turn more than the upper body.
- You are taught how to turn left and right, & come to a complete stop through turning. Ski edges are released and re-engaged through directional movements of your body toward the new turn, both skis are guided through an arc.
- You are taught speed control through the use of turn shape & direction change

LEVEL 2: You are able to link turns to the right and left and come to a complete, controlled stop.

🏂 You are able to avoid other skiers and stationary objects. You are riding a surface lift.



- You will continue to develop balance while moving & better control of speed, through shaping of your turns, legs turn more than your upper body, developing counter, upper body faces the new turn
- You may advance to the Monadnock Chair lift
- **LEVEL 3**: You are able to turn & come to a controlled stop in both directions; able to make medium and long radius turns on Green terrain, serviced by a chair lift. You are able to slow your descent, or speed it up as terrain and traffic dictate, & stop whenever deemed necessary. Your turns are initiated through leg movements, not upper body, pivot point is under mid foot. Your speed control comes through guiding both skis through an arc across the "fall" line.
 - You continue to develop a variety of turn shapes, & use simple terrain features as rolls or bumps.
 - You will begin to skid and realign your skis to corresponding edges, (Parallel), at turn completion.
- **LEVEL 4**: Turns begin using a slight wedge through directional movements, you are able to guide and skid your skis to parallel at turn completion. You are able to control speed through turn shape and stop on command, as traffic dictates.
 - You will continue to work on realigning your skis on, or after the gravity, or "fall" line, speed control is through shaping of the turns.
 - You will continue to develop skill through changing of speed and terrain variations, and may venture to Ralph's Run, our Green Blue transition trail
- **LEVEL 5**: You initiate your turns using a very slight wedge, above the "fall" line, and realign the skis above the fall line. You are skiing groomed blue terrain. Legs initiate turns, more than the upper body. You have flow from turn to turn, without a traverse, early edge engagement above the fall line allows for controlling of speed through entire turn.
 - You will continue to explore turn shapes on steeper groomed blues for speed control, edge angles are created by the pitch of the hill and remaining balanced over the ski and foot to foot.
 - Directional movements are complemented by the pole swing and touch
 - You start to develop a parallel turn entry through completion with directional movements, both legs doing the same thing at the same time, weight is transferred to the outside ski early in the turn
- **LEVEL 6**: Your skis remain parallel throughout the entire turn. Pole swing and touch complement the movement of the body in the direction of the new turn, allowing for a simultaneous edge release, legs turn more than the upper body. You ski most groomed blue trails, with accurate speed control.
 - You will continue to refine skills moving to easy black terrain
 - Upper lower body separation will continue to develop through accurate steering of the legs, more than the upper body, Weight is transferred to the outside ski early in the turn.
 - Edge angles are dictated by the pitch of the hill.
- **LEVEL 7**: Skis remain parallel at all times. Can ski easy Black terrain. Accurate balance and stance allow for the creation of more dynamic edge angles, using angulation and inclination, not banking or tipping up hill.
 - You are exploring the dynamics of ski design through carving and Rail Road Track Turns on Blue runs
 - Explore and experiment with skill blends on variable terrain, as moguls, crud and ice.
- **LEVEL 8**: Can make accurate carved parallel turns on Blue trails. Able to ski groomed Blacks, with accurate pole usage and edging. Uses a variety of turn shapes for speed control. Able to ski more difficult black terrain moguls. Accurate upper lower body separation allows for more dynamic short radius turns, using the design of the ski.
 - Develop accuracy of movement in long, medium and short radius turns
 - Explores more dynamic turns and rebounds from turn to turn through the bending of the ski



Accurate pressure managing skills allow clean edge engagement and release through higher speed turn

LEVEL 9: Can ski most all Black terrain except the gnarliest. Able to ski all conditions, all terrain, any time.



Progression Cards

This discussion may seem redundant and even perhaps a waste of time, but there have been many issues over the past seasons that resulted in customers being placed in groups well above their true skiing levels, which leads to less than ideal conditions for class handling, and experiences for our guests.

Remember that each customer is different, and when you change the conditions, the volume of skiers/riders on the hill, or the pitch of the hill, a once successful skier at a specific level, may show you a significantly different picture. With that said, please be considerate, thoughtful, and honest when filling out Progression Cards.

Discussions

Level 1: See above description

If a customer is **NOT** turning in both directions, is **NOT** able to control speed through turn shape, or come to a complete controlled stop while turning, **they will remain a Level 1**. This also means that the customer is still not using (or should not be using) Ollie's Carpet Lift.

If the customer has attained all at Level 1, you may take them up the Carpet Lift on Ollie's, where you will continue to reinforce turning using your legs, more than the upper body, use a variety of turn shapes for speed control and avoidance of stationary and moving obstacles. If all is achieved, they can advance to Level 2, for the next lesson.

Level 2: See above description

Am I a Level 2? Are you able to turn right and left, control your speed and come to a complete controlled stop? Are you riding the Carpet Lift? If "Yes", they may join the Level 2 group, if 'No" have them return to Level 1.

Start everyone with a I run on Ollie's, if they can turn in both directions and come to a complete controlled stop, you can proceed to Easy Rider, if they are unable to do so, you can deliver them back to the Level 1 lesson on Ollie's area.

Reassess your group on the longer run off Easy Rider and if you are confident, your group can proceed to the Monadnock Chair. During Level 2, make a variety of turn shapes, long medium, and short turns. Ski on the diagonal, ski faster, ski slower through the use of turn shaping. Assess individual ability to maneuver around stationary and moving objects. Discuss the Responsibility Code, Live the Code.

If they have achieved all of the above, they can advance to Level 3. If you are not confident that they can safely turn down anything longer than the Easy Rider slope, they will remain at Level 2.

Level 3: See above description

Am I a level 3? Are you able to turn right and left, control your speed and come to a complete controlled stop? Are you riding a surface lift? Are you riding a chair lift? If the answers are yes, then they can probably join the Level 3.

If there is hesitation with regard to ability to turn and come to a complete stop, they are Level 2.

Start everyone on Ollie's or Easy Rider to assess skills, and move from there. At Level 3, you will be using a variety of turn shapes, you will explore variations in speed and terrain, and begin to realign your skis at turn completion. You initiate your turns in a Wedge, on opposing edges, but begin to finish your turns on corresponding edges, in a parallel configuration.

You will learn how to get on and off, the Monadnock Chair, you will be taught how to ride the chair safely. The Responsibility Code will be reinforced through class activities and actions.

LEVEL 4: See above description

Am I a Level 4? Are you able to start your turns in a Wedge, but end in Parallel? Are you riding the Monadnock Chair Lift? Can you control your speed through shaping of your turns? If there is hesitation, go to Level 3, if "Yes" to these questions, go to Level 4.

Take a warm up run on Monadnock chair to assess skills. If they are able to control their speed through turn shape, initiate turns with a Wedge, but end in Parallel, are comfortable with higher speeds, are able to maneuver to avoid stationary and moving objects, AND, If you are confident they will be able to handle the pitch at the bottom of Ralph' Run, proceed to the Minuteman Express Lift. Your will continue to explore variations in terrain, utilizing rolls or mounds of snow to help realign your skis on or after the Fall line. Your legs turn more than your upper body and the legs initiate your turning. Speed is controlled through continued shaping of your turns, and the skidding of the skis in parallel configuration at turn completion, especially as the terrain pitch increases.

LEVEL 5: See above description

Am I a Level 5? Do you start your turns using a slight Wedge and finish in Parallel? Have you been riding the Minuteman Lift and skiing down Ralph's Run? If 'No", go to Level 4, if "Yes", they may join Level 5. If someone has never been off the Monadnock area, they should not be placed in any Level higher than Level 4!

You initiate your turns using a very slight wedge, above the gravity, "fall" line, and realign the skis above the "fall" line. You are skiing easy groomed blue terrain. Your legs initiate the turns, and turn more than the upper body. You have flow from turn to turn, without a traverse, turn shape dictates speed. You will learn pole usage for timing and complementing the directional movements of your Center of Mass, toward the new turn. If you are comfortable skiing on Ralph's Run, and movements are not deffensive as you ski the last pitch on Raph's, you may move to ski on Hitchcock, Frannie's Folly and a Piece of Cake. Continued development of realigning the skis earlier into the turn and work toward a complete parallel turn entry.

If skiers no longer start their turns on opposing edges, but on corresponding edges, they are Level 6 skiers! If they still are opening their skis to a Wwedge to begin their turns, especially as the pitch gets steeper, they should remaim at Level 5 until skill and or confidence builds, through mileage!

LEVEL 6: See above description

Am I a Level 6? Do you ski using a Wedge at all? Do you begin and end your turns with your skis parallel? Are you comfortable skiing, Ralph's Run, Hitchcock, Frannie's Folly and Piece of Cake? If, they are using the Wedge at all, to start their turns, they are **NOT** Level 6. Are you able to realign your skis to parallel at any time in your turns? Further investigate the terrain they have been using, perhaps they are Level 4 or 5. Remember many of our guests think that if they have skied 5 times, they are now Level 6! By asking these questions you are better able to assess the appropriate level they should be in to further their successes.

Remember, be considerate, thoughtful, and honest when filling out Progression Cards, that is what creates successes!

Should I wear a helmet?

As an instructor, you may be asked by your customers, is wearing a helmet necessary. There is not a policy at Wachusett that mandates wearing a helmet unless you are in the terrain park or in our children's Programs. What is your response to your guest? It is a personal decision, but you may also respond by asking do you wear a bike helmet, or playing hockey, or skateboarding?

Whatever response you decide to choose, it is important that you impress upon the individual that they should **choose** a **helmet designed for snow sports** Helmets are not designed to wear ski hats under them, this impacts the fit & effectiveness. A bicycle, hockey, or skateboard helmet are not designed to take the impact that a ski or riding fall will cause.

Head injuries are the most common injuries in our snow sports, Helmets have been shown to reduce head injury from a fall by 20-50%, they are designed to protect you in speeds less than 15 mph! Not designed to protect you from a high-speed impact into an immovable or stationary object. The bottom line is to ski/ride in control.

You can find detailed information on the internet regarding standards for Snow Sports Helmets.

The most important things to remember when involved in snow sports

- 1) Prevent falls in the first place, take a lesson!
- 2) Reduce head injury by wearing a properly fitted helmet and one that is designed for snow sports
- 3) Recognize the symptoms of a head injury if a fall should occur

4) Know and Follow the Code!

Be informed so that you can intelligently answer questions you may be asked. A great reference article is from the US Consumer Product Safety Counsel, titled "Which Helmet for Which Activity"

If You Get Hired

Thank you for your participation in our Instructor Training Course. This course is for you to learn how to become a ski or snowboard instructor using the National P.S.I.A. and A.A.S.I. techniques and how they are used here at Wachusett Mountain. Participation in our course does not imply that you will be hired. Your employment depends upon your ITC SCOREs and your AVAILABLITY to meet our scheduling needs. Your scores will be available to you within 72 hours of the final day of the ITC Program. Please DO NOT call the ski School to find if you are hired, our School staff will contact you.

If you get hired:

If your score meets our requirements you will receive a call from us. At that time, we will set an appointment for you to meet your supervisor and go over your schedule. After you are called there is some paper work that must be completed to finalize your hiring once your schedule has been agreed upon.

PLEASE BRING:

- Two forms of I.D. which can be: Passport, Drivers License or permit, Birth Certificate or School I.D.
- Work Permit if you are under 18 years old
- Credit Card for your jacket deposit

YOU WILL NEED TO FILL OUT THE FOLLOWING WHEN YOU GET HERE:

- Wachusett Mountain Employment Information Sheet
- Ski School Information Sheet
- Ski School Schedule Information
- W-4 for tax deductions
- I-9 for proof of citizenship
- Wachusett Garment Agreement

We only contact those who we are going to offer a position. It may take up to 2 weeks. If you do not hear from us immediately after the evaluation that does not mean that you will not be hired. After the first group is hired, we start another round of hiring until we have filled our staffing needs..

After you are hired, you will be required to view or attend Mountain Informational sessions, videos and the like. As a Snow Sports Instructor, you are in Contact with our guests longer than any other group on the Mountain. You will greet your guest in uniform, with a name tag. Your uniform is black pants and the Red Wachusett Jacket. If is raining, since we do not have official Rain Gear, you are allowed to wear clothing that will keep you dry, but you must always have your name where our customers can see it. As weather get warmer, your uniform will be black pants, your red jacket, or Wachusett Logo wear vests, or other **Long Sleeved** Wachusett Logo wear shirts. Short sleeve tees do not provide a Professional or uniform appearance. The Black Wachusett puffy is NOT allowed to be worn as our teaching uniform. When you are on the mountain during your shift, but do not get a lesson, you are NOT allowed to wear the Red Ski School Jacket.

SEASON PASSES

If you have already purchased a season pass you must turn it in at the Ski School within seven days of being hired to get a full refund.

As an active teaching member of our ski and snowboard school, you receive a Gold pass. Part of your responsibility as a member of our Ski and Snowboard Staff is to submit and fulfill your Season's teaching schedule, that will afford you the ability to teach **at least** 40 hours during the season. You are required to attend at least 4 regularly scheduled weekly in season clinics (Certification Focus clinics do not count toward the 4) These are required and you will be paid for them, as long as you

attend them in Full. Our Instructor training course has merely opened the door of snow sports for you, it is important that you maintain, and continue your personal and professional growth through the attendance at clinics. Fulfillment of your agreed schedule, your attendance at required clinics, and gate scans during the season are taken into consideration for subsequent rehire for our next Season.

Thank you for attending our Instructor Training course.

All the clinicians and I truly hope you enjoy the experience.

Best of luck, Courtney Crowley Director fs Snow sports School