

Alpine Skiing Performance and Technical/MA Assessment Strategies for Trainers

Instructor Decisions and Behavior: Applies to all three candidate levels

Candidates should positively affect group dynamics in the following ways:

- Be Risk Aware - speak out when people are in a potentially risky situation (such as an inappropriate stopping place)
- Follow Directions
- Manage Emotions
 - This could be especially critical for participants who take exams on consecutive days and may be moving forward with another segment of the exam having failed to meet the standard for a segment on the previous day. If this could be a troubling issue for a candidate, they should consider taking assessments on non-consecutive days.
- Encourage & offer feedback in the context of helping participants understand what is being shared.
- Avoid calling out or otherwise stressing your fellow candidates

Resources for trainers and candidates can be found on www.thesnowpros.org, and at <https://www.psia-i.org/disciplines/alpine/alpine-certification/>. The following outline includes the framework for a basic training program for **Skiing and Technical Knowledge/MA** success. This outline focuses on exam preparation yet can be used to train teachers whether they aspire to an exam or just aspire toward positive job performance.

Skiing Performance & MA/Technical Understanding

In addition to the manuals, resources for Skiing and Technical Understanding success can be found on the above website. These include:

- **Certification Standards**: The level of expertise expected for each level.
- **Alpine Performance Guide** : Defines the learning outcomes candidates should have mastered before attempting the Ski portion and the MA/Technical portion of the assessment. The appropriate ski performance focus and MA/Technical knowledge for each certification level are integral to each other, especially when identifying real and ideal ski and /or body performance in the candidates themselves as well as others.
- **Assessment Forms**: Scoresheets that will be employed.
- **Alpine Assessment Guide for L2 L3** Description of the exam day and expectations for how the exam will be conducted; candidates should be well aware of expectations prior to attending the exam.
- **Activity Guide** : List of highlighted & blended activities candidates may be asked to perform at the Intermountain assessment. Highlighted activities isolate movements related to a certain fundamental whereas blended activities apply the fundamentals to achieve an outcome.

The information below brings information from all the above resources to provide a comparative outline to help simplify and organize thinking. For additional depth, please refer to these documents.

Skiing Performance

Candidates demonstrate their ability to execute body movements necessary to affect the desired ski performance in a changing environment as dictated at each cert level.

- Real vs. Ideal: candidates can describe their own skiing as it relates to an ideal performance in any task or applied situation **at their respective levels**; *it's difficult to make changes without understanding where you are now before exploring where you need to go.*
- Determining whether candidates meet skiing performance standards for their level of certification should be a joint effort between candidate and trainers.

Performance Guide Overview of Skiing Skills at Level I Proficiency:

A successful Level I instructor is able to adjust and adapt the Alpine Skiing Fundamentals to manage and control speed through turn shape on beginner and easier intermediate terrain.

Assessment observations have concluded that unsuccessful candidates at L1 may:

- attempt to focus on too much information at any one time.
- lack the ability to maintain a centered stance and utilize leg rotation effectively
- be somewhat back of the BOS
- attempt to “edge” the ski to a point where leg rotation becomes inaccessible

We fully realize, all fundamentals are involved in performance. The focus below encourages L1 candidates to achieve optimal development by simplifying, however any of the fundamentals can be explored and this is an example. Focusing on skill development based on the two fundamentals below will help to remedy the insufficiencies listed above.

Level I Focus and Training Topics: Two Fundamentals

- Control the relationship of the CM to the BOS to direct pressure along the length of the ski; do candidates:
 - Understand the role of ankle flex
 - Understand how to move CM over feet or feet under CM, how to get there, keep it there, get it back if CM is not remaining in an effective relationship
 - Apply this fundamental to phases of the turn
- Control the skis rotation with leg rotation
 - Can they separate from the upper body? Isolate leg turning

- Can they reduce the edge angle enough to be able to steer the skis? (still a focus on steering but understand the relationship between high edge angles and the ability to easily steer the skis)
- Choose activities most beneficial in coaching movements related to this fundamental

Once candidates have mastered the ability to stand in the middle of their skis and shape a round turn with a focus on leg rotation, begin to vary turn size, shape and speed with intent while still remaining focused on these two fundamentals. You may need to coach a flatter ski to get that to happen or you may need to incorporate a leg rotation focus on the outside ski.

Level 1 candidates should have a basic understanding of all the fundamentals, and how the ski interacts with the snow. Performance and MA skills will be better served by keeping the practice and observation focuses simple.

Performance Guide Overview of Skiing Skills at Level II Proficiency:

Successful Level 2 candidates can **proactively** adjust line, turn size and turn shape based on terrain and outcome. A Level II instructor can demonstrate specific outcomes in beginner, intermediate, and some advanced terrain.

Assessment observations have concluded that unsuccessful candidates at L2 may:

- Be unable to produce a parallel turn
 - usually due to lack of ability to control timing of edge release & inefficient leg turning i.e. a turn that does not involve stemming, stepping or rotary push-off movements
- Be unable to effectively control pressure from ski to ski and direct pressure towards the outside ski when terrain difficulty increases

Again, all five fundamentals are involved in ski performance. Identify the ski snow interaction as it relates, while adding one or two of the following fundamentals at this level, continues to develop skill & increase success at meeting L2 standard.

Level II Focus and Training Topics: Three Fundamentals

Enhance abilities in L1 fundamental focus and choose the fundamental(s) most appropriate for the candidate's progression

- Add: Control Edge Angles thru Inclination and Angulation
 - At this level, focus more on the timing and reduction of edge angles to produce a parallel turn versus creating higher edge angles
 - What movements reduce edge angles; even though this will encompass foot to foot movements as well as movements that contribute to managing the

magnitude of pressure, keep the focus on the fact that the outcome is to reduce the edge angle and be able to turn both feet simultaneously

- Which activities would be most beneficial in coaching movements related to this fundamental

- Or Add: Control pressure from ski to ski and direct pressure towards the outside ski
 - Focus on a smooth transition from ski to ski and timing of those movements
 - What movements compliment transition from ski to ski
 - Describe related ski performance aspects
 - What activities would be most beneficial in coaching movements related to this fundamental

Once candidates have mastered edge release movements that contribute to a solid parallel turn, begin to vary turn size, shape, and speed with intent as well as adding more variable terrain to the mix. They can also add their understanding of either or both of the added fundamentals to their ability to observe efficiency or deficiency in their students.

Performance Guide Overview of Skiing Skills at Level III Proficiency:

A Level III instructor adjusts and adapts the Alpine Skiing Fundamentals to demonstrate any specific skiing or ski performance outcome through the advanced zone. Candidates can apply all fundamentals at will, varying or blending to achieve multiple outcomes.

Assessment observations indicate candidates at this level of proficiency lack the ability to:

- utilize ski design more effectively throughout all phases of the turn
- demonstrate round turn shape in all terrain & conditions, adapt to varying conditions or terrain
- create edge angle prior to or very near the fall line when asked to perform a more dynamic turn
- modulate,blend or un-blend (isolate) all fundamentals used based on the outcome presented
- create earlier edge angles at the initiation phase of the turn (versus an L2 candidate who may rely more on steering/leg rotation at initiation)
- modulate or adjust the DIRT of each fundamental to successfully fulfill multiple outcomes

Level III Focus and Training Topics: All Five Fundamentals

Enhance precision & abilities to manage all fundamentals under L1 and L2 proficiencies, add focus on regulation of magnitude of pressure.

- Regulate the magnitude of pressure created through ski/snow interaction
 - This fundamental is accented more heavily with the increase in terrain difficulty as well as increased pressures created with more dynamic skiing.
 - Candidates should understand all variations for regulating magnitude of pressure
 - Varying the other 4 fundamentals

- Reacting & changing to what the ski is doing, feedback from the ski
 - Setting yourself up to manage what the ski is doing on the snow
- Candidates should be able to increase and decrease the intensity of the application of the fundamentals to meet the outcomes associated with advanced skiing
 - Can they adapt a fundamental quickly and precisely to vary turn shape & speed
 - Can they modify, increase, decrease the use of all fundamentals simultaneously
 - Can they apply skills in various conditions with similar precision
 - Can they choose activities that will isolate or blend chosen fundamentals
- Candidates can perform a variety of highlighted and blended activities and efficiently adjust on demand, to meet an intended outcome.

Training Topics for Improving Skiing Performance:

- Use the Activity Guide to choose exercises that will isolate as well as blend movements necessary for effective ski performance; focus on weaknesses and not just strengths
- Engage in **focused practice and repetition** to improve performance
- Use terrain with consistent pitch & conditions before varying the elements or application
- Set parameters of tactics that force the coordination of the body to manage the reaction from the skis and still meet the outcome
- If necessary, break the task into manageable pieces before reconstructing the activity into its whole; avoid practicing the same poorly executed drill or exercise over and over; change the learning tactics to get desired performance
- Once performance is reasonably accurate: vary speed, terrain, turn size, shape etc.
Exam Candidates can be asked to perform any variation of a chosen task or exercise;
Examples:
 - Vary the use of the fundamentals to produce a slower or faster descent
 - Funnels, hourglass, or any combination of turn size & shape that you can create
 - Apply the task or exercise focus in different terrain and conditions as appropriate for each cert level

Technical Knowledge and Understanding

General Knowledge: Applicable to All Levels

- Understand the PSIA Skills Concept vs. The Alpine Skiing Fundamentals
 - The PSIA Skills Concept establishes **what** we do with our skis
 - The Alpine Skiing Fundamentals tell us **how** to do it; they define best practices for how to apply the skills effectively in a changing environment

- Identify the components of the Skills Concept & the Alpine Skiing Fundamentals
- Be able to discuss basic biomechanics appropriate for each cert level
- Understand the Fundamentals and their relationships: although the five fundamentals stand alone, they also interact with one another in a way that makes each fundamental dependent on the others
- Develop understanding of the phases of the turn and how to connect desired movements and desired outcome to the ideal in relation to them.

Specific Knowledge at Each Level:

- A Level I instructor uses current PSIA alpine resources to describe elements of ideal performances using at least one of the alpine fundamentals through beginner and novice zones.
- A Level II instructor uses current PSIA alpine resources to describe ideal performances, using two or more Alpine Skiing Fundamentals and considering tactics and equipment choices through the intermediate zone.
- A Level III instructor references current and historic PSIA alpine resources and information to evaluate ideal performances, using the Alpine Skiing Fundamentals and considering tactics and equipment choices through skill zones.

Training Topics for Technical Knowledge and Understanding:

- Read and reread the Alpine Technical Manual; ask questions
- Read the Appendix to the Alpine Technical Manual: Alpine Skiing Fundamentals (order through PSIA website - it's free)
- Complete online appropriate level study courses from the PSIA website
- Engage in round-table discussions with candidate groups
- Level III: Look at outside reading sources available through PSIA
- On-snow session: Explore eliminating ideal performance of one fundamental from a prescribed task and see how it affects one or two of the other fundamentals; Examples:
 - It's difficult to turn your skis independent of your upper body if you are in the back seat. How does being out of balance affect each segment of the turn? Try it!
 - It's also difficult to steer the skis in a brushed track if you have too much edge angle. Experiment with speed & steering options while varying the edge angles.
 - Vary edge angle in bumps and see how it affects the ability to manage the magnitude of pressure from ski/snow interaction

Movement Analysis Skills

General Analysis Skill: Applicable to All Levels

- Develop Observation Skills and Descriptive Vocabulary
- Identify ideal and real performance as it relates to the prescribed fundamentals at each cert level (see above)
- Identify accurate cause-and-effect relationships between ski & body performance
- Prescribe strategies for improving body and ski performance relative to achieving a desired outcome

Unsuccessful candidates tend to use vague descriptions and generalities when describing ski and body performance. For example: fore/aft looks good, foot to foot looks good, or turn shape is OK. These comments do not tell us anything about actual ski and body performance. A more specific comment would be “Skier tends to be back, i.e. hips are behind his/her feet and this makes it difficult to begin the turn with the front of the ski. Hence, the skier tends to push the tails of the skis to change direction.”

Specific Analysis Skill: Applicable at Each Level from the PSIA Performance Guide

- **Level I instructor:** Articulates an accurate cause-and-effect relationship between body and ski performance within any single skiing fundamental in a specific phase of the turn to offer a relevant prescription for change for skiers in the beginner/novice zone.
- **Level II instructor:** Articulates accurate cause-and-effect relationships of at least two skiing fundamentals through all phases of the turn, resulting in an effective prescription for change for skiers through the intermediate zone.
- **Level III instructor:** Describes cause-and-effect relationships of all the Alpine Skiing Fundamentals through all turn phases, resulting in an effective prescription for change for skiers through the advanced zone.

Training Topics for Movement Analysis (keep in mind Cert level focus as listed above)

- [Read Chapter 6 of the Alpine Technical Manual](#) and discuss components and strategies of Movement Analysis
- Develop Movement Analysis Process & Become Proficient
- Practice Movement Analysis using video and on-snow sessions.
- Define method for observation; whole or part and why
- Observe ski performance and describe it; at each phase of the turn with just one fundamental, gradually adding each fundamental as appropriate for cert level
- Observe body performance and describe it; same as above
- Try this activity: using video, cover the skier’s body movements and see if you can identify ski performance; conversely, cover ski performance and see if you can identify body movements. Try this activity outside in real time.
- Practice stating the cause-and-effect and identifying the focus (which fundamental or blend of fundamentals) for performance improvement.
- Create Prescriptions and Communicating Strategy for Improvement

- Develop Summary Statements: Succinctly stating observation, evaluation, prescription. It's not necessary to go through each phase of the turn with each fundamental when giving your final evaluation although practicing in this manner has value.

Common Reasons for Not Meeting Standards

Level 1:

1. Ski - Does not perform tasks as described and demonstrated.
2. Ski - Skis a very different or inconsistent speed, turn shape or turn size than described/demonstrated
3. Ski - Undeveloped ability to blend or un-blend (isolate) two fundamentals
4. Tech - Incorrectly identifying or applying a Fundamental repeatedly (Turn the legs to unweight!)
5. MA - Not accurately separating body movements from ski-on-snow performance
6. MA - Inability to describe mechanics of one Fundamental: all phases, cause/effect, prescribe

Level 2 - All of the above plus:

1. Ski - Undeveloped ability to blend or un-blend (isolate) three fundamentals
2. Ski - Sequential release of edges that creates a non-parallel ski relationship at initiation
3. Tech - Unable to make an accurate comparison of their personal performance to an agreed ideal
4. MA - Inability to describe mechanics of two Fundamental: all phases, cause/effect, prescribe
5. MA - Inaccurate observation of ski performance when connecting 2 or more Fundamentals

Level 3 - : All of the above plus:

1. Ski - Undeveloped ability to blend or un-blend (isolate) all fundamentals
2. Ski - Does not replace a dominant (well-rehearsed) movement pattern upon request
3. Ski - Does not demonstrate round turn shape in all terrain and conditions
4. Ski - Inability to adapt to varying conditions or terrain-
5. MA - Inability to describe mechanics of all Fundamental: all phases, cause/effect, prescribe
6. MA - Lack of understanding of how all Fundamentals connect