PSIA-C
Trainer Development Program

MODULE II

Evaluation Preparation
&
Movement Assessment

On Snow & Indoor Training

Acknowledgments

REVISION #2: **We would like to thank the members of the Trainers Development Committee who volunteered their time to update and revise this workbook and training program:**

Chair:	**Vicki Garves-Berg**
Committee Members:	**Doug Berg, Matt Clements, Jeff Kennedy, Mark Lewis, Steve Lewis, and Phil Montville**
Reproduction Assistant:	**Beth Shampo**

We would also like to thank the Professional Ski Instructors of America - Education Foundation for permission to use parts of their publications in making this Workbook.

REVISION #1: **We would like to thank the members of the Trainers Development Committee who volunteered their time to update and revise this workbook and training program:**

Chair:	**Jeff Kennedy**
Committee Members:	**Vicki Garves-Berg, Grant Nakamura, Glen Peterson, Ned Pinske, and Lisa Weinberger**

We would also like to thank the Professional Ski Instructors of America - Education Foundation for permission to use parts of their publications in making this Workbook.

ORIGINAL: **We would like to thank the members of the Trainers Development Committee who volunteered their time to create this workbook and training program:**

Chair:	**Ned Pinske**
Committee Members:	**Doug Berg, Vicki Garves-Berg, David Kamke, Jeff Kennedy, Betsy Massie, Grant Nakamura, Mark Overland, Tom Schulz, Jerry Sorenson, and Lisa Weinberger**

We would also like to thank the Professional Ski Instructors of America - Education Foundation for permission to use parts of their publications in making this Workbook.

Course Outline

Module II

Day 1

I. Evaluation Preparation

- A. Training vs. Performance
- B. Elements of Optimal Performance

II. The Candidate's Responsibilities

- A. Beginning the Training Process
- B. Training for Performance
- C. Evaluation / Performance Day

III. The Trainer's Responsibilities

Day 2

I. Movement Assessment

- A. The Common Fundamental Movements

II. Developing a Systematic Observational Strategy

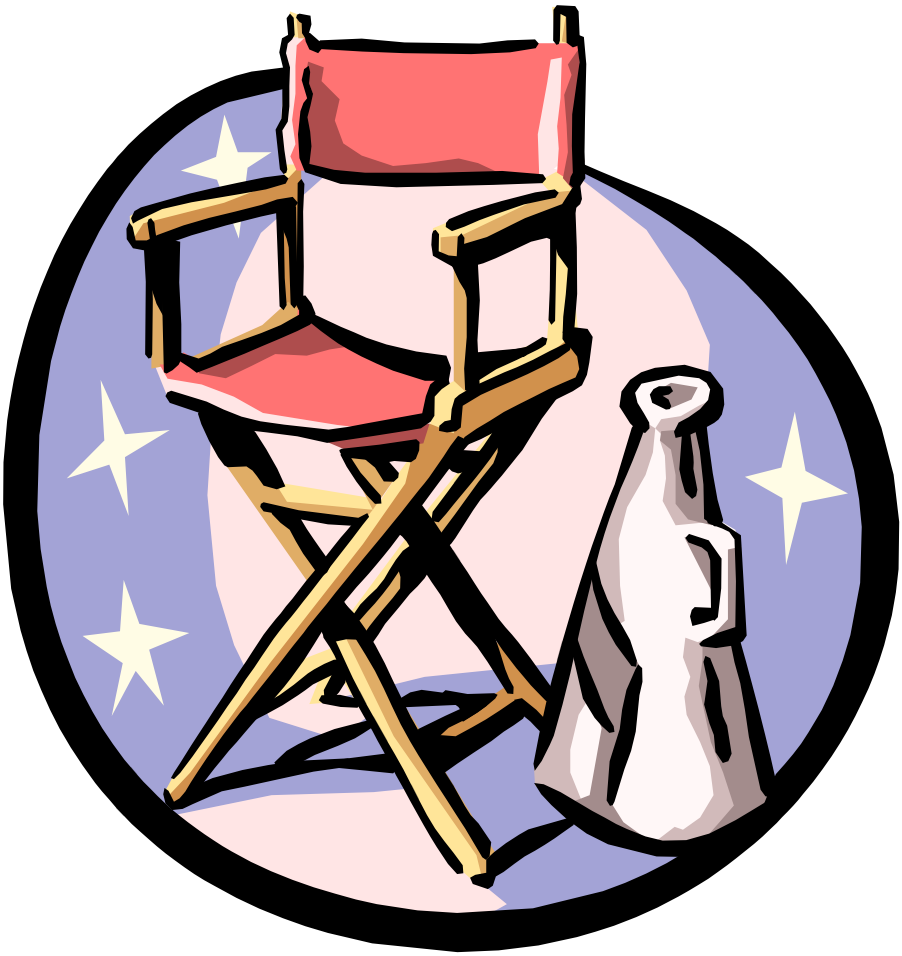
- A. Critical Features of SOS
- B. Effective Evaluation & Diagnosis

III. The Trainer's Responsibilities

- A. "Bag O' Tricks"
- B. Feedback Tips
- C. Creativity

[Page intentionally left blank and unnumbered.]

Evaluation Preparation



Presenter Needs:

PSIA Alpine Skiing References Video

Handouts:

PSIA-C Skiing Tasks

PSIA National Certification Standards

PSIA-C Daily Performance Evaluation Form

Several elements of this section are adapted from Alpine Skiing *(PSIA, 1996) and printed by permission of the Professional Ski Instructors of America Education Foundation.*

Evaluation Preparation

Introduce:

- ***Yourself***
- ***Each Other***
- ***Logistics***
- ***This Module***
- ***Goals***

Performance Objectives:

Given the information shared and the group activities, the trainers will be better able to train a candidate for an evaluation situation by understanding the "Elements of Optimum Performance" and the evolution from Training to Performance modes.

Enabling Objectives:

At the conclusion of "Evaluation Preparation," the trainer will be able to:

Identify and *apply* the "Elements of Optimum Performance."

Define the evolution from the "Training" to the "Performance" mode.

Identify the candidates' responsibilities in their preparation for an evaluation situation.

Identify the trainers' responsibilities in assisting a candidate prepare for an evaluation situation.

Better understand and *clarify* the PSIA standards and requirements in a certification evaluation situation.

Evaluation Preparation

How Do You Help A Candidate Prepare For An Evaluation Situation?

Training vs. Performance

Definition:

Training is when we begin to learn a new skill or improve on a skill, ultimately to prepare for a performance situation. Training is when we learn new information, make changes, and receive feedback to elicit change. The training mode is when we learn, grow, and improve. This is when "bad habits" are identified, effective/positive changes are implemented, and strengths are reinforced and enhanced. Remember to include equally Skiing, Teaching, and Technical focuses. Training should be balanced in these three areas so the candidate can identify their areas of strength and weakness.

Performance is when we begin to polish our effective/positive Skiing, Teaching, and Technical skills. We evolve from the Training mode to the Performance mode. Once we begin preparing for an evaluation, changes should already be made and skills should be solid in foundation. Only then can we begin our discipline process, development of "muscle memory," and "perfect practice."

The candidate preparing for an evaluation situation begins in the Training mode and, on a continuum, moves into the Performance mode. The timing of this is individual and is based on the difference between making gross changes of improvement toward the practice of disciplining precise skiing movements and teaching presentations.

Group Activity:

Write down activities and professions that require training for performance.

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

Share brainstorming with the group.

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

Racecar Driver, Surgeon, etc.

. . . . . .

Racecar Drivers do not start out racing a car at 200 mph for the first time in the Indy 500, nor does a surgeon perform a heart transplant during their first surgery.

. . . . . .

. . . . . .

Everyone who is expected to perform at a certain level has had to train through certain milestones. The same should be for a candidate preparing for an evaluation situation.

. . . . . .

Evaluation Preparation

. . . . . .

If we keep the 4 elements of optimal performance in the forefront, we can better focus on our goals in Training and Performance.

. . . . . .

. . . . . .

Elements of Optimal Performance

The following elements are based on a theoretical process developed by Mermer Blakeslee to help us organize and clarify the way we evolve from training to performance. Mermer is a former PSIA National Demonstration Team Member and author. She calls them the **Elements of Optimum Performance:**

Team	Mentor	Ritual	Mindset

The elements change as our intensity and situation changes. The following will help to clarify the process toward an evaluation situation.

Training	**Performance**
(Practice)	(Actual Evaluation)
Team:	
• Those with the same/similar goals	• Others going through the same evaluation / the same group
• All devoted to the process	
• Those with a similar timeline • Your peers, those you trust and can be honest with	• Those with whom you sense trust, you can commiserate and decompress with
• Those you practice with and share feedback	• Create a "Team" that you can bounce off ideas
• Support each other through the training process	• Team members all work toward the same goal and do not compete against each other but compete for the same achievement
Mentor:	
• Someone of authority	• Actually at the evaluation or just a phone call away
• Devoted to your process	• Helps keep you focused
• Trusting, open relationship	• Filters paranoia
• Effective feedback	• Encourages
• Committed to your aspirations	• Listens
	• Moral supporter
Ritual:	
• Perfect practice	• Utilize your "comfort" behaviors (Music)
• Discipline	• Use / implement your "Cue Words"
• Discover your "comfort" behaviors	• Reject your "NAG"
• Discover your "comforting" rituals/habits	
• Discover your psych-out situations and behaviors (your "NAG")	
• Develop your "Cue Words"	
Mindset:	
• Identify your positive/negative (+/-) self-talk	• Do it / Leave it!!!
• Practice the mental state of evaluation (mental pressure)	• Don't carry on the "baggage" • Encourage your positive (+) self-talk
• Practice the decomposition of psychological pressure	• Distinguish your negative (-) self-talk (your "NAG")
• Practice visualization	
• Practice imagery	

Evaluation Preparation

Training	vs.	Performing
Parts	→	Whole
Technique	→	Tactics
Evaluation	→	Immediate Future (Do it and forget it)
Goal	→	Task

Group Activity:

Practice the "mindset" of performance

Close your eyes

Internalize / imagine the sensation of …

Think of a "Cue Word" that would help you successfully perform … (the skiing task)

Task: . . . . . .

. . . . . .

Cue Word(s): . . . . . .

. . . . . .

Have the group visualize a skiing task (i.e., one ski)

Skiing on one ski (i.e., balancing / leverage / centering your dynamic stance)

Have the group share their "Cue Words" and point out the differences.

Some examples may be: "smooth," "forward," "ankle," "edge release," "centered," etc.

Different focuses, different intensity.

*A **"Cue Word"** is customized to the person and the task. It is individualized to help the person perform at their best, with confidence and precision. A **"Cue Word"** should also help decrease anxiety.*

Evaluation Preparation

Begin today and plan toward the evaluation time (i.e., set the goal date of "next March."

Create a realistic timeframe. Give yourself the time necessary to train through your areas of needed growth, and polish your areas of strength.

Where do we begin with the candidate?

The Candidate's Responsibilities:

1. **Commit to the Process**
   Create a realistic training schedule (see timeline)

Timeline Exercise:

Write on the timeline the milestones you think a candidate should achieve as they prepare for an evaluation.

Share with the group.

TRAINING TIMELINE

Keep referring back to the Timeline as the outline is discussed.
Timeline should be relatively complete by the end of the day.

Physical Conditioning	Reading Text		
6 months			

Dryland Technical Knowledge / Progression Development / PDS Study Group			
5 months			

Training Mode / Contracting / Team Development			
4 months			

Pass Written Exam	Video Self	Check Written Exam Results	Performance: "Perfect Practice"
3 months			

Take Exam Prep.	Written Exam Retake (if necessary)		Mock Exam
8 weeks	7 weeks	6 weeks	5 weeks

Send Event $	Monitor & Adjust / Video to Polish		Rest & Relax	Event
4 weeks	3 weeks	2 weeks	1 week	*

Evaluation Preparation

2. Make a Contract

This contract is made with yourself and stated publicly.

Your written training timeline is also a contract.

A contract helps you stay committed and focused.

3. Training Partnership (Team)

Choose a training partner or partners.

Choose someone who has the same goals and a similar timeframe.

Choose someone who has a similar enthusiasm and seriousness in the commitment of achieving success.

Choose someone with whom you can create an honest, trusting, and comfortable training relationship.

Choose someone with whom you both can inspire, build up, commiserate, and decompress.

4. Mentor Partnership (Mentor)

Choose someone who is also committed to the process of training and coaching. A Trainer who has put the effort into their own growth by attending PSIA-C's "Advanced Trainer Development Programs."

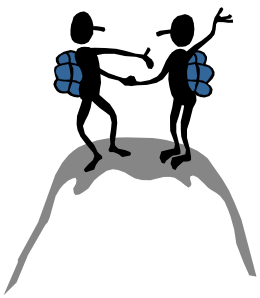
Choose someone of "authority."

Choose someone with empathy and knowledge of the process.

Choose someone whose judgment you value.

Choose someone willing to commit to your schedule.

Choose someone who has the ability to give you objective and effective feedback.



Evaluation Preparation

Begin the Training Process

1. Prepare Your Equipment

Get properly aligned to ensure symmetry and optimum efficiency.

Utilize custom footbeds.

Tune and wax skis frequently.

Your skis, boots, and poles are your tools. Your tools should enhance your performance, not hinder it.

2. Physical Conditioning

Prepare your endurance to ski and "perform" all day, times 2-3 days consecutively.

Anxiety and fatigue effect performance.

3. Knowledge/Technical Preparation

Ensure that you are a current PSIA-C and National Member.

Create a current library of skiing, teaching, and technical information. ***Read, Read, Read.***

Create a technical study group with your training partners and mentors.

Attend the PSIA-C "Professional Development Series."

Prepare for the written exam.

Create a video library. *Examples:* *PSIA Alpine Skiing References Video*
World Cup Racing
Any video with skiing visuals will help to train your eye and enhance your movement analysis skills.

Create a notebook (pocket-size)
Keep notes. *Examples:* *Teaching progressions*
Skiing Tips (for you & your students)
Technical facts

Develop a knowledge foundation of current equipment.

Familiarize yourself with the current National Certification Standards, published yearly in *The Professional Skier*.

Utilize PSIA-C and PSIA National websites.

The written exam must be "passed" in order to qualify for the "on-snow" evaluation.

Evaluation Preparation

Group Activity - On Snow:
Ski Training for Evaluation

The group will focus on further defining the evolution from the Training mode to the Performance mode in skiing evaluation.

The group will clarify the **"Training Mode"** concept by focusing on the **"Elements of Optimal Performance."**

1. Team
2. Mentor
3. Ritual
4. Mindset (development of "Cue Words")

On-Snow training application of:
PSIA-C Skiing Tasks
PSIA Centerline Maneuvers

Example: One-ski skiing

Group Activity - On Snow:
Skiing for Performance in an Evaluation

The group will evolve from the "Training Mode" to the "Performance Mode," emphasizing how the "Optimal Elements" change for evaluation.

The group will practice a "Mock Evaluation," focusing on:

1. Team
2. Mentor
3. Ritual
4. Mindset (using "Cue Words")

Discuss and demonstrate additional elements of "mindset" in skiing performance:

Imagery
Muscle memory
Anxiety- and fear-reducing exercises

On-Snow training application of:
PSIA-C Skiing Tasks
PSIA Centerline Maneuvers

"What are the evaluators looking for?"

View PSIA Alpine Skiing References Video.

Evaluation Preparation

Begin Training for Performance

Begin your teaching and skiing practice. The discipline of preparing for a performance situation, such as a certification evaluation, needs a different mindset. The mental conditioning is as important as the physical conditioning. This is when the candidate has identified and completed the gross areas of growth in their teaching and skiing.

Now it is time to begin "polishing" those skills and evolving into the discipline of "perfect practice."

Ski, ski, ski … Teach, teach, teach . . . Practice, practice, practice!!!

Discover a "Cue Word" you can say to yourself that enhances your performance.

A "Cue Word" should push you, give you permission, and give comfort and confidence. In addition, a "Cue Word" should give precision.

1. "Perfect Practice" in Teaching

Create teaching progressions for the level of certification (i.e., Wedge turns through Open Parallel [Level 1-7] if working toward Level II Certification).

Focus on different approaches to the same area of emphasis.

a. Introduce: Present a new skill level
Example - Introduce open parallel, focusing on the initiation phase of the turn.

b. Refine: A specific skill or phase of the turn is specifically polished.
Example - Edge re-engagement is after the fall-line in an open parallel, resulting in skidded, "z-shaped" turn during the control and finish phases of the turn.
Refine edge release and engagement in an open parallel (Level 7).

c. Adapt: Making an adjustment to improve the overall task. Cause and Effect situation.
Example - Pole-touch timing is too late and affecting the overall flow; focus on pole-touch timing.

Practice presentations including all the elements of "The PSIA Teaching Model."

Practice presenting your teaching progressions in front of your mentor, peers, and training partners. They can then give you feedback on your presentation:

- Overall flow
- Overall completeness
- Overall accuracy and understandability
- Overall presence (voice, posture, demeanor, and FUN!!!)

Attend a PSIA-C Teaching Development Workshop.

Evaluation Preparation

2. "Perfect Practice" in Skiing

Cue Word (Mindset)

Attend a PSIA-C Skiing Development Workshop

Practice the skiing maneuvers of every level in the PSIA Skiing Model.

Example: Level II Certification - Wedge Turns through Dynamic Parallel Turns

Practice the Skiing Tasks.

Videotape yourself and your training partners.

Practice your Movement Analysis skills.

Practice giving and receiving effective feedback.

Utilize imagery and visualization techniques to picture in your mind the "perfect turn" or the "perfect run."

Ski, ski, ski . . . Mileage, mileage, mileage.

3. "Perfect Practice" in Technical

Practice accurate terminology application.

Practice relating basic terminology into simple language.

Attend a PSIA-C Exam Preparation Workshop.

Practice giving feedback and eliciting change.

Familiarize yourself with the evolution of PSIA Centerline Maneuvers to Common Fundamental Movements (a/k/a Visual Cues to Effective and Ineffective Skiing).

Create a study group.

Evaluation Preparation

4. "Perfect Practice" in Confidence

Mentor another instructor who is working toward your certified level.

Ritual - Know yourself; know your habits.

Identify ritualistic behaviors that help you relax and those that make you nervous.

. . . . . .

. . . . . .

. . . . . .

Identify what psychs you up and what psychs you out. Focus on the positive rituals.

Imagery/Visualization

. . . . . .

. . . . . .

. . . . . .

Anxiety and Fear Reduction

Diminish the exam horror stories and myths.

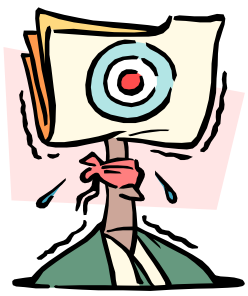
Work on diminishing the emotional paranoia.

Giving yourself ample time to prepare for an evaluation can help you reduce anxiety and increase your confidence.

Relaxation Techniques

Music

Biofeedback



Evaluation Preparation

Evaluation / Performance Day!

The **"perfect practice"** has helped you achieve the mastery necessary to be successful in an evaluation situation. Your mentor and peers have given you the "thumbs up." You feel confident in your blend of skills and have achieved the performance proficiency essential for accomplishment.

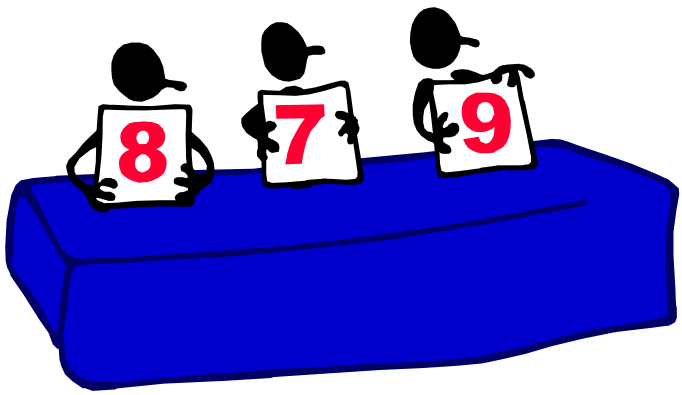
1. Planning for the Evaluation/Performance Day

a. Know the Evaluation Schedule:
- Deadline for registration
- Start Times
- Prerequisites
- Directions to the Ski Area

b. Begin the day with your "Performance Rituals."
- Good breakfast
- Good night's sleep/rested/relaxed
- Remember your "lucky socks"
- Listen to your energy music
- Stretch/run/get the blood flowing

c. Prepare your equipment
- Dry gloves
- Dry boots
- Tune your skis
- Charge your boot batteries (warm feet are happy feet)

d. Prepare for any weather conditions
- Multiple pairs of socks
- Hat
- Goggles/sunglasses
- Sunscreen
- Contact solution and/or extra contact lenses
- Gloves/mittens
- Layers of clothes



Evaluation Preparation

Group Brainstorming:
What are responsibilities of Trainers/Coaches?

The Trainer's Responsibilities

As a trainer helping a candidate prepare for an evaluation, you have a unique and rewarding opportunity. You as a trainer will also benefit and grow from this experience. Your knowledge base can become broadened and current. Your skiing skills can be enhanced by the simple fact that you too will be out on the slopes more often. But possibly one of your most valuable rewards is the growth and enhancement of your ability to guide, encourage, coach, and support those who have aspired to improve themselves, which ultimately improves your ski school.

Group Discussion:

What do you think are your responsibilities?

1. Determine the Committed Candidates

a. Discuss with the candidate their goals.

b. Discuss with the candidate their timeline.

c. Assess if the candidate's aspirations are obtainable in their timeline.

d. Organize your candidate groups accordingly.

2. Determine Your Training Costs

a. Cost of candidates.

b. Training Staff cost.

c. Expenses of "Traveling Examiners"
Contact the PSIA-C office early in the fall to schedule.

d. Build your literature and video library.

Evaluation Preparation

3. Dry-Land Training (September/October/November)
(Dry-land training can be utilized for all the "talk.")

a. Technical Study Groups
- Written test preparation
- Children's
- Adult (Women and Senior issues)
- Assign reports for research
  - Suggested topics:
    - Alignment/canting/boot fitting
    - Child development related to age
    - Different learning styles
    - Current changes and improvements in Alpine equipment.

b. Video Review
- Movement analysis - practice giving and receiving feedback
- Alpine Skiing References video
- World Cup racing
- USSA racing and coaching
- Any skiing visual

c. Teaching Study Groups
- Teaching progression development - share the progressions to help the candidates develop their notebooks
- Mock teaching/role playing

d. Physical Conditioning Training
- Stretching and Flexibility
- Endurance Training

e. Present the PSIA Models
- Customer Service Model
- Teaching Model
- Skiing Model

f. Review the current PSIA Certification Standards

g. Review the PSIA-C Skiing Tasks

Encourage your candidates to attend the PSIA-C Professional Development Series, usually offered in October (see Central Line Event schedule).

Encourage your candidates to successfully "pass" their written test. You can arrange this by contacting the PSIA-C office; the written test is offered at all events.

Evaluation Preparation

4. On-Snow Training

a. Establish your "On-Snow" training schedule.

- Choose a time when you will be least likely to be interrupted.
  Examples: Sunday mornings or Monday evenings

b. Choose division of training times between working with the groups and the individuals.

c. Encourage the candidates to sign up for a December PSIA-C Workshop.

- Exam Prep
- Skiing Development
- Teaching Development

5. On-Snow Topics

a. The Skiing Model

- Candidates' personal skiing improvement
- Video tape their skiing to assess their areas of improvement and keep track of their progress
- Help the candidate identify their "Cue Word"
- Practice the Centerline Maneuvers
  "Perfect Practice"
  Discipline/polish skiing movements
  Video their progress
- Practice the PSIA-C Skiing Tasks
  Practice to a higher level of proficiency
  Video their progress
- Practice on all terrain and in all snow conditions
  Bumps
  Steeps
  Crud
  Ice
  Powder
- Movement Analysis
  Solidify the Common Fundamental Movements
- Practice giving and receiving effective feedback
- Mileage, mileage, mileagec

Evaluation Preparation

b. The Teaching Model

- Assign teaching focuses:
  - Introduce
  - Refine
  - Adapt
  - Centerline Skill based

- Give the candidate multiple opportunities to present to their peers.
  - This can increase their confidence.
  - This can decrease presentation anxiety and help them feel more comfortable and confident, especially when they actually present in an evaluation/performance situation.

- Assess the candidate's completeness in presentation - i.e., "Are all the elements of the PSIA Teaching Model included?"

- Most commonly missed elements:
  - Stating the goal
  - Giving feedback and then adapting accordingly
  - Asking for understanding
  - Recap / Summary
  - Including all the "Learning Styles"

- Other suggestions to help your candidates polish their teaching presentations:
  - Ask questions of the evaluator prior to their presentation, especially if they do not understand the assignment.
  - Practice stating the focus/goal.
  - Practice giving a clear skiing demonstration.
  - Practice stating a simple focus, demonstrating, and moving the group - it is difficult to learn a moving sport without moving!!
  - "Keep It Simple!"

Evaluation Preparation

Group Discussion:

Review National PSIA Certification Standards
Review PSIA-C Daily Performance Evaluation Form
Discuss common exam day's schedule and process
Questions and answers concerning the evaluation process

REFERENCES:

Training Materials

Professional Development Portfolio
Alpine Movement Assessment Pocket Guide
Vail Children's and Adult Alpine Handbook

Current American Teaching System Materials by PSIA

PSIA Alpine Manual
PSIA Alpine Study Guides
- Level I
- Level II
- Level III

PSIA Alpine Handbook
PSIA/AASI Children's Instruction Handbook: Alpine Skiing & Snowboarding
PSIA Children's Instruction Manual
PSIA Alpine Entry-Level Guide for Children's Instructors
Captain Zembo's Ski & Snowboard Guide for Kids
Children's Skiing Games Reference - by Jeff Kennedy

American Teaching System Videos

PSIA Alpine Skiing References
American Teaching System Alpine Skiing, Volume 1 and Volume 2
Learn to Ski Better 2

Any Text or Video with skiing or related activity can be an invaluable tool.

United States Ski Association (USSA) also produces many references.

Please also refer to your "Trainer Development Program - Boot Camp" Workbook.

Evaluation Preparation

Notes:

Evaluation Preparation

Alpine Skiing Tasks

	Level I Mild Terrain	Level II Moderate Terrain	Level III Advanced Terrain
Traverse	Traverse across hill with minimal slipping.	Traverse with no slippage. Traverse with steps up and down hill.	Traverse through bumps. Traverse on uphill ski only on moderate terrain.
Open Parallel With No Poles	Skis in matched position most of the time.	Skis in consistently matched position.	Skis in consistently matched position.
Vertical Side Slips	Side Slip in one direction of skiers' choice.	Side Slip in both directions while maintaining consistent speed and control.	Side Slip in both directions while maintaining consistent speed and control. Performed in a limited corridor.
Uphill Christy	Christy with shallow entry should have forward movement with moderate edge engagement to stop.	Christy with shallow to "in-the-fall-line" entry should have forward movement with improved carve vs. skidding.	Christy with shallow to "in-the-fall-line" entry should have forward movement with carve vs. skidding. Should be performed with flexion or extension to facilitate Christy.
Hop Turns	(Flat Terrain) Performed with no forward motion required. Should include some degree of direction change.	(Mild to Moderate Terrain) Performed with slow forward movement with displacement or tip and tail while maintaining rhythmic sequence.	(Moderate to Advanced Terrain) Performed with slow forward movement with displacement of tip and tail while maintaining rhythmic sequence.
Wedge Hop	(Flat Terrain) Performed with or without forward movement. Weight change should be foot to foot.	(Mild to Moderate Terrain) Performed with consistent forward movement. Weight change should be foot to foot. May or may not include inside ski swing (wedge swing hop).	(Moderate to Advanced Terrain) Performed with consistent forward movement. Weight change should be foot to foot. May or may not include inside ski swing (wedge swing hop).
Leapers	Should have noticeable extension. Skis may or may not leave snow pack.	Performed with skis coming off snow with changes in direction.	Performed with skis coming off snow. Edge and direction changes both occur during this time.
One-Ski Skiing	Balance on one ski with forward movement. Turns are not necessary. Skier can use either ski.	(Mild to Moderate Terrain) Easy turns on one leg of skier's choice.	(Moderate to Advanced Terrain) Series of easy turns on alternating legs.
Hockey Stops	Basic Hockey Stop with matched skis. Performed in direction of skier's choice.	Fall line Hockey Stop in both directions to a complete stop.	Fall line Hockey Stop in both directions to a complete stop. Performed with and without poles to a complete stop.
Skating	(Flat Terrain) Skate on flat terrain.	(Flat and Mild Terrain) Skating on flat terrain, downhill, or across the hill.	(Moderate Terrain) Skating downhill, utilizing outside to inside edge.
Stem Turn	Simple stem to start turn.	Perform Stem Christy.	Perform Stem Turn and Stem Christy.
1000 Steps	Traverse with stepping uphill out of track. Also, 1000-Step turns with no stepping required during turn transitions.	(Mild Terrain) 1000-Step turns while stepping through complete turn.	(Mild to Moderate Terrain) 1000-Step turns while stepping throughout complete turn. Should have minimal edge slip.
Falling Leaf	Falling Leaf in one direction with fore and aft pressure to create slight forward and reverse arc.	Falling Leaf in both directions with forward and reverse arcs.	Falling Leaf with forward arc, reverse arc, then direction and edge change. Repeat in new direction.

Evaluation Preparation

Training Timeline

6 months			

5 months			

4 months			

3 months			

8 weeks	**7 weeks**	**6 weeks**	**5 weeks**

Send Event $ **Event**

4 weeks	**3 weeks**	**2 weeks**	**1 week** ✱

[Page intentionally left blank.}

Movement Assessment

Trainer Development Program II

Day 2

Several elements of this section are adapted from Alpine Skiing *(PSIA, 1996) and printed by permission of the Professional Ski Instructors of America Education Foundation.*

Introduce:
- **Yourself**
- **Each Other**
- **Logistics**
- **This Module**
- **Goals**

Movement Assessment

Introduction

Skiing is a sport of constant movement. As instructors and coaches, we need to understand the movements of skiing, be able to observe these movements, and develop strategies to enhance the performance of these movements.

Performance Objective:

Given structured group activities, identify the Common Fundamental Movements of Skiing, utilizing the concept of a systematic observational strategy to develop strategies for performance enhancement.

Enabling Objectives:

At the conclusion of this section, the participant will be able to:

Identify the Common Fundamental Movements (CFMs) of Skiing.

Utilize the Concept of a Systematic Observational Strategy (SOS).

Demonstrate effective strategies for improving performance.

Movement Assessment

The Common Fundamental Movements of Skiing

Introduction

PSIA's American Teaching System (ATS) has evolved considerably over the past decade. Its Skills Concept and the Centerline have become the foundation of ATS. The missing element to make the connection between skills and milestones has been a clear definition of the movements that make up "good skiing."

Enter the Common Fundamental Movements (CFMs). These movements provide concepts that are easy to understand, see, and feel. They can help instructors and coaches teach their athletes better. CFMs are a reference for good skiing in most ski instruction situations. They cannot describe every movement and position that high-level skiers pass through while performing in extreme situations, such as World Cup racing and mogul skiing. CFMs are the bridge that connects the skills and the milestones of Centerline.

The CFMs do describe the basics of skiing well. These movements are the foundation of skiing movements for all skiers, including instructors, high-level Alpine racers, mogul skiers, and extreme skiers.

ATS Perspective

The Skills Concept provides a tool for analyzing all of the possible skiing movements. Instructors and coaches must understand the interdependence of the skills and how they blend together in order to effectively use the Skills Concept.

The Centerline illustrates what skiing looks like as skills develop. The specific maneuvers of the Centerline are intended as reference points to help evaluate skill development, not as performance targets.

The Common Fundamental Movements are a simplified description of basic movements observed in quality skiing. They define basic movements necessary for efficient and effective skiing at all skill levels.

What Are They?

CFMs are not intended to be a complete description of how to ski. Words only begin to describe the complexity of movement required while skiing. However, CFMs do highlight those movements that are generally required for good skiing.

Movement Assessment

Balance on the Whole Foot

Flex and extend the ankles, knees, hips, and spine to balance over the whole foot as you flow with terrain and control pressure on the skis.

What it looks like:	**What it doesn't look like:**
The outside ski bends from the middle.	The knees and hips flex without ankle flex.
The shins maintain contact with both boot tongues.	The hips are continuously behind the feet.
The body moves continuously with the skis.	The ankles are over-flexed with the body's mass continuously in front of the feet.
The skis maintain contact with the snow as they flow over the terrain.	The legs are always flexed or always extended with no shortening and lengthening of the legs during the turn.
All of the joints work together evenly.	Extension is primarily vertical, leading to late edge engagement.
The body is relaxed over the skis.	The body is tense and rigid.

Balance on the Outside Ski

Direct your balance to the outside ski in the turn.

What it looks like:	**What it doesn't look like:**
The outside ski bends more than the inside ski.	The inside ski bends as much or more than the outside ski in a turn.
The shoulders stay level to the horizon or they become more level through the turn.	The inside hand is continuously lower than the outside hand in a turn.
The inside half of the body leads the outside half through the turn.	The inside hand is back.
The inside leg is flexed more than the outside leg in a turn.	The outside ski runs straighter than the inside ski, i.e., the outside ski does not "come around."
	The shoulders are always tipped toward the inside of the turn and never level out relative to the horizon.

Movement Assessment

Release and Engage the Edges with the Legs

Use diagonal (forward and lateral) movements of the feet, legs, and hips to release and engage the edges of the skis. These movements are smooth and coordinated.

What it looks like:	What it doesn't look like:
The skis tip on edge early in a turn.	The upper body tips to engage the edges.
The shins contact both boot shafts forward and laterally.	Edging comes primarily from the knee without involving the whole leg.
The ski edges are released and engaged with one smooth movement.	Edge release occurs with exaggerated vertical movement instead of forward and lateral movement.
The ski lead change occurs before the fall line.	Edge release always occurs with a lifting of the downhill ski.
	The legs are always flexed or always extended with no shortening or lengthening of the legs during turns.

Turn the Legs Under the Body

Turn your legs under your body to assist in guiding the skis through the turn.

What it looks like:	What it doesn't look like:
The legs turn more than the upper body.	The shoulders, torso, or hips initiate turning of the skis.
Turning movements originate in the feet and legs.	The outside hand crosses in front of the body.
The upper body is stable and quiet.	The skis pivot more than necessary for desired turn shape.
	Pivoting of the skis is uncontrolled.

Discipline the Upper Body

Direct your upper body and swing the pole to flow with the skis through turns.

What it looks like:	What it doesn't look like:
The body is relaxed yet stable.	Vision is down or not in the desired direction of travel.
Vision is forward, and the eyes look to the intended direction of travel.	Pole swing is late, non-existent, or erratic.
The hands are forward.	The body does not flow down the hill but continuously moves rearwards or "clings" to the hill and previous turn.
The inside hand, shoulder, and hip lead through a turn.	The hands are low or behind the shoulders.
The shoulders are forward of the hips.	
The pole swings smoothly in the intended direction of travel.	

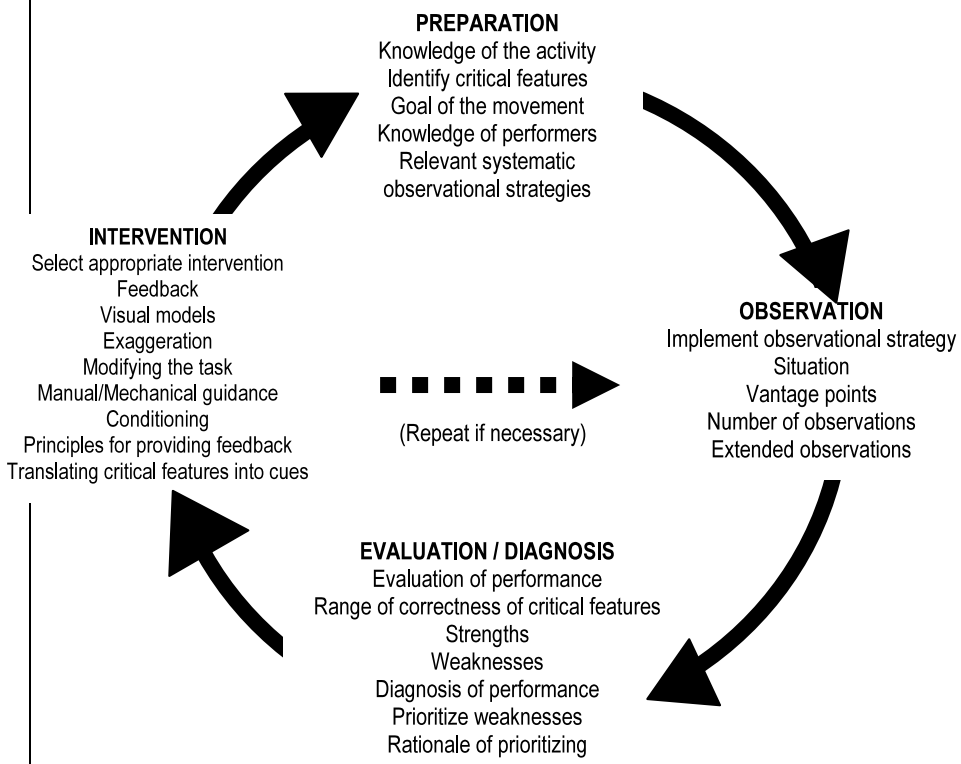
Movement Assessment

Developing a Systematic Observational Strategy

"The goal of a systematic observational strategy (SOS) is to provide a platform to gather relevant information on the status of a person's movement performance."

"A simple view of observation of human movement essentially involves two main decisions: what (focus) to observe and how (a plan) to observe. The critical features identified in the preparation phase are the focus of the SOS. The how of an SOS is more complicated and may be different for different analysts."

- Knudson & Morrison



Most of us have been schooled in the "art" of movement analysis, but few of us have been taught how to accurately and reliably observe our students. As you can see from the figure above, observation is only part of the process of Movement Assessment. Why break apart this assessment in such a way? By separating the objectivity of observation from the subjective nature of evaluation and diagnosis, we allow ourselves the opportunity to see the performance for what it is, not what it could be or what it is lacking.

Having an SOS lets us focus on just the performer and the movements that make up the performance without judgment. We can then see what it is and describe it within the parameters of the movement.

Movement Assessment

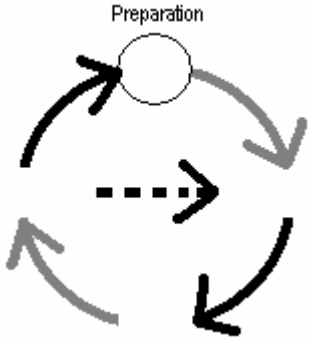
Critical Features

What are critical features?

Researchers involved in human movement talk about breaking down a movement or series of movements (a task) into its most basic parts. With this fundamental information, we have something very specific on which we can focus our attention. These parts of a movement or task are its critical features.

Critical Features are the "key features of a movement that are necessary for optimal performance." - Knudson & Morrison

"They are aspects of movement that are the most invariant across performers and are the least adaptable if the goal of the movement is to be achieved safely and efficiently." - Knudson & Morrison

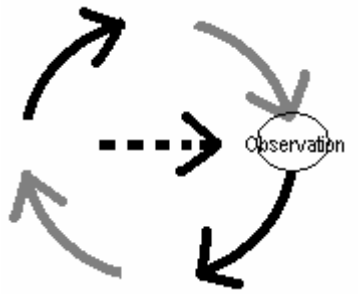


The Common Fundamental Movements are the Critical Features of Skiing Movements.

These critical features provide the connection between the Skills Concept and the Centerline:
Performance (Centerline maneuver or task) ➔ Ski Behavior (Skill) ➔ Movement (Critical Feature) ➔ Body Part

Centerline Task (Performance)	Skill (Ski Behavior)	Critical Feature (Movement)	Body Part
Wedge Wedge Christie Open Parallel Dynamic Parallel	Balance Pressure Control Edge Control Rotary	Twisting Flexion / Extension Tipping Fore / Aft	Foot / Ankle Knee Hip Torso Shoulders Head Arms / Hands

Movement Assessment



Seeing All There Is To See

The important points in the observation phase:

- Observation is based on knowledge of the activity, the performer, effective instruction techniques, and a systematic observational strategy.
- Observation is based on a variety of sensory information (VAK) and the interaction of all the senses, not just vision.
- Attention is an important component of observation, so be ready to focus your attention with an SOS.
- An SOS can be organized by the phases of the movement, by balance, by ranking of critical features, or from the general to the specific.
- Control the situation to optimize observation and the subject's performance. In other words, try to limit the number of distractions so both the athlete and the observer can focus on the task.
- Select appropriate vantage points, viewing distances, and number of observations.
- Integrate your observations with the performer's perceptions.
- Use techniques like video replay to extend your observational powers.

"We can only see what our experience permits us to see."

As the observer's experience increases, so does the ability to see the movements of a specific task. A novice instructor/coach should not be expected to see the same subtle movement patterns as his colleague with several years of teaching and coaching experience.

The CFMs offer the novice instructor/coach a framework on which to build their observational experience. Using them as a tool, the instructors' coach (you) can direct their training in movement assessment.

Critical Feature Exercise:

Looking at each critical feature, discuss how an instructor's experience may affect their ability to see the movements in each category. Rank the visual cues by experience level (novice ➔ L1 ➔ L2 ➔ L3 ➔ ???) that you would expect an instructor to consistently see the movement.

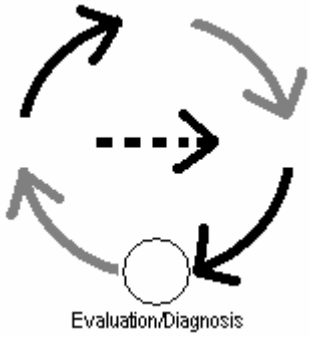
What would you expect from a Level 1?

Movement Assessment

Effective Evaluation and Diagnosis

Observing an athlete's movements can provide the observer with a great amount of information, especially if the athlete is a novice with an abundance of ineffective movements. "Where do you start?" Equally overwhelming is the advanced or expert athlete with subtle errors. "Where does that error stem?"

Effective assessment of an athlete's movements involves two distinct processes: 1) the evaluation of the strengths and weaknesses of performance, and 2) the diagnosis of the reasons those strengths and weaknesses exist. These processes allow the instructor/coach to select the most appropriate intervention to improve performance.



Cause vs. Effect
"Disease" vs. "Symptoms"

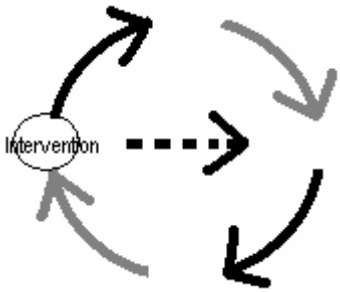
The Process of Evaluation

Evaluation should focus on the efficiency of the movement and its appropriateness to the environment. The quality of the critical features of the movement becomes the focus of the evaluation task. A simple evaluation process that is reliable and accurate should be employed. Rating an athlete's critical feature performance as inadequate, within the desirable range, or excessive fulfills that goal.

Just as the ability to observe the critical features is affected by the observer's experience, so will the evaluation be impacted by the instructor's knowledge of the range of correctness of each of the critical features. Therefore, the trainer must provide good benchmarks for their instructors to see and understand.

Prioritization of Movement Error Interventions

The coach's evaluation of an athlete's performance may reveal several movement errors and causes of those errors. Research has shown that an athlete can focus on only one correction at a time. The instructor will need to decide which intervention is the most effective and/or appropriate for the athlete. There is no absolute prioritization of interventions for each individual athlete. It will be dictated by the athlete's learning style, the coach's experience, and the goal of the exercise and practice, among other factors.



Methods from prioritizing interventions include: *relationship to previous actions, maximizing improvement, in order of difficulty, correct sequence, base of support, and critical features first.*

Relationship to Previous Actions - Cause or Effect?

Maximizing Improvement - Which intervention will provide the most improvement?

In Order of Difficulty - Easiest corrections first.

Correct Sequence - Provide intervention in the sequence of the actions in the turn (Preparation ➔ Initiation ➔ Control ➔ Finish).

Base of Support - Provide intervention to improve performance from the base of support up.

Critical Features First - Correcting critical features before addressing other general points of correct form should help the athlete achieve the movement goal faster.

Movement Assessment

The Diagnostic Challenge

Your mission is to find the "root cause," or the "why" of an athlete's movement error. In other words, is the movement error a **cause** or an **effect**? The *disease* or a *symptom*? Categorizing the visual cues observed into the appropriate critical features is the first step in doing "root cause analysis."

If the observer understands the CFMs and how the body makes those movements, he or she can distill the visual cues down to their root cause. If a performer consistently exhibits technique outside the "range of correctness" for a critical feature, this must be evaluated as a weakness or performance error. This "range of correctness" should be very clear in the mind of the observer prior to any movement assessment attempt.

A good way to think about "root cause analysis" is to look from general to specific. Remember how we showed how the critical features connect the Centerline and the Skills Concept: Performance (Centerline maneuver or task) ➔ Ski Behavior (Skill) ➔ Movement (Critical Feature) ➔ Body Part.

The focus of the evaluation of the performance ("good" vs. "bad") will then change to the ski behavior. The ski behavior is directly affected by the movement (or lack of movement) of the body part(s) involved.

Group Root Cause Analysis Exercise:

Watch the first video and use the provided table to write down your assessment. First, define the skier and the task (example: The task is _____ at _____ level.). Next, on a "gut-level," make the judgment (example: Does it meet the standard?). Next, break it down by each CFM. Does the performance of the task break down because of lack of Balance on the Whole Foot, etc. Then, rank the student's CFMs by their strengths. Remember that some of the weaknesses seen may actually be effects from previous movements or lack of movements. Finally (and the most difficult part), decide which CFM would provide the most benefit to the student if you were to intervene and enhance their movement(s).

Observation and Evaluation Exercises Using Videos:

Using a similar format, watch several skiers. The goal is to try to find a consensus on what is the "root" cause for each skier.

Root Cause Assessment Worksheet

Task: _____ Meets / Doesn't Meet Standard.

CFM	Positive Cues	Strength Rank	Negative Cues	C/E	Weakness Rank
Balance on Whole Foot					
Balance Towards Outside Ski					
Release / Engage with the Legs					
Turn the Legs Under the Body					
Discipline the upper Body					

[Page intentionally left blank.}

Movement Assessment

Move It To The Lab: On-Snow

The goal of the "lab" is to practice using an SOS and to better see and understand the CFMs.

The first "experiment" will be as a group. The first task is Open Parallel; the group leader is the focus of the group's observation and assessment. Assign a specific CFM to each participant. We will ski in a "line rotation" so each participant will be able to see the group leader's movements several times. At the end of the run, group together the participants by their CFM and have them compare and contrast their observations and assessments. Share with entire group.

The second "experiment" will be in groups of three. The task will be Wedge Christie. Each group will select their own "victim." The other two members of the group will observe and assess the other member from two different vantage points, i.e., have one go to the bottom and the other at a halfway point. Compare and contrast the observations at the bottom. Repeat, but switch observation points and now use Open Parallel. "Show me the money!" Which CFM would you work on first? Why?

The third "experiment" will use the general public. Stay in the same groups of three. Choose a "victim" and observe and assess their movement. Again, "Show me the money!" Allow time for group discussion between each "victim."

Groups numbered 1-5

- ***Line rotation ski -- each group focuses on the movement.***

Groups of 3

- ***Practice vantage points for observation.***

Intervention: Strategies for Improving Performance

As we discussed before, intervention is the step the instructor/coach takes to improve or enhance an athlete's performance. Through the evaluation and diagnostic stage, we have uncovered the performer's movement strengths and weaknesses. Deciding where to start and how to style the intervention is a matter of instructor experience and style and the athlete's learning style.

"Bag O' Tricks"

As an instructor's "bag o' tricks" gets larger, the opportunity to tailor a lesson becomes broader. Every new experience with a student provides more information to use the next time around. Many a novice instructor will use a cookie-cutter approach to their lessons, but as their experience increases, they realize how ineffective some "tricks" are when used for the wrong reason. As their trainer, you need to help them understand how each "trick" affects the athlete's movements. The instructor then will begin to understand the "why" of movement error and corrections.

Group Exercise:

Have each participant describe a favorite "trick," and then discuss the "why" in one or two of the CFMs.

Movement Assessment

Styles

Teaching and learning styles should affect the content of the lesson an dhow it will be conducted. We discussed and explored our own learning styles in "Boot Camp." New instructors need to understand how they learn and how that affects the way they teach. Adapting their teaching style to the learning style of their students is a difficult task, but it's one that will create huge benefits for both the instructor and the students.

Group Exercise:

Use the same "tricks" from the last exercise. Discuss the "style" of the "trick." Can the "trick" be altered to be used for different learning styles?

Creativity in Lesson Planning

In "Boot Camp," we explored creativity and put the creative process into a model form: Explorer, Artist, Judge, and Warrior. We need to use our creativity to add a spark to our lessons so that our students and we don't become bored.

Group Creativity Exercise:

Watch the same first skier from this morning and use the already completed form. In which CFM did we decide to intervene? Describe a scenario around which we will create an effective intervention plan. For example, the student is a musician. How can we develop a lesson out of our "bag o' tricks" that will connect with her musical talent? Taking the same target intervention, describe another scenario.

Example: The student recently returned from a vacation at Disney World.

Work through it again. Try to utilize a different part of the Artist's palette, if possible.

Feedback

Providing good feedback is the most effective intervention an instructor can do for an athlete. However, providing poor feedback can be just as detrimental. Knowing how to provide effective feedback can make or break a lesson or a clinic.

Feedback is simply **"information about a person's behavior that is given to that person by someone else."** It describes what they actually did; not what you think they did, or what you think they had in their mind at the time, but what they actually did.

Movement Assessment

Feedback can be divided into two categories: *1) knowledge of results (KR), and 2) knowledge of performance (KP).* KR is information about the outcome of the task (e.g., meets/does not meet standard or finish time). KP is information about the movement process, the actual execution or movements of the body (e.g., inadequate ankle flexion or legs turn under the legs within the desirable range).

KR is best used as a motivational tool rather than a way to provide feedback about specific movement patterns.

Regardless of the situation, most people want feedback. However, most people don't like the way the feedback is delivered.

KR = the Reward

KP = what you need to "do" and "know" to achieve the Reward!

Feedback Tips:

Don't give too much feedback.

Be specific.

Don't delay feedback.

Keep it positive.

Provide frequent feedback, especially for novices.

Use cue words or phrases.

Don't give too much feedback.

Too much feedback can be worse than no feedback. By focusing on one or two CFMs in your evaluation/diagnosis and intervention, your feedback will be more focused and effective.

Be specific.

Point out the CFMs you are focusing on; be very specific. People can't modify their behavior or movements when the description is too general. Unless you identify specific movements, the student might choose to ignore feedback by saying, "I have no idea what you are talking about."

Don't delay feedback.

Feedback is most effective when it is given immediately. The sooner a student receives feedback, the easier it is to integrate that feedback with their own perceptions. This makes it much easier to make the changes needed to enhance their performance and to continue to improve, even when the coach is not present.

Keep it positive.

Provide feedback on the movement (or behavior), not on the student. Keep their self-esteem high and focus on their strengths. Use "I" statements as opposed to "you" statements to reduce defensiveness. Give the feedback in a calm manner with appropriate verbal and body language.

Movement Assessment

Provide frequent feedback.

Find a balance to your feedback. If you comment early in a lesson and then at the end, then you haven't guided their practice. Bud don't go overboard. They need to learn to "feel" the movements and integrate your feedback with their own perception of how they are doing.

Use cue words or phrases

Work with your students to find cue words or phrases that will help them remind themselves of the correct movement(s). "Strong inside cheek" might remind a student not to let the inside half sag into the turn. "Breathe" might help a student smooth a jerky motion.

Move It To The Lab: On-Snow

Continue work from this morning with added lesson planning, using same groups of three. The group leader will be the focus of the groups. Task from the Level II task list, "Show me the money!" Why? Give each group a scenario on which to base their development of a lesson plan. Share with the other groups. Repeat using a general public skier.

Working with feedback - Stay in the groups of three. Select a task from the Level II task list. Have one member of the triad do the task, and have one member observe, assess, and give feedback to the first member. The third member will be the observer of the feedback process and a facilitator of discussion at the end of the run. Give them two opportunities to observe, assess, and give feedback on the task. Then at the end of the run, discuss in their groups the following questions:

Was the feedback effective?
Was the feedback specific?
Did the member providing the feedback give it in a positive manner?

Rotate so each member of the group has the opportunity to perform each role but a new Level II task.

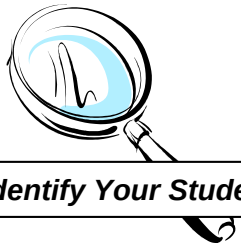
Developing cue words and phrases - Still in the same groups, observe and assess each other doing a specific Level II task. Have each group develop a cue word or phrase that each member can use to enhance their movement. Share the cue words with the whole group at the end.

References

Knudson, D. V. and Morrison, C.S. (1997). Qualitative Analysis of Human Movement. Champaign, IL: Human Kinetics.

Movement Assessment

Creativity Worksheet



Identify Your Student

Scenario: . . . . . .

. . . . . .

Task: . . . . . .

. . . . . .

CFM Strengths: . . . . . .

. . . . . .

CFM Weaknesses: . . . . . .

. . . . . .

"Show Me The Money!" . . . . . .

. . . . . .

Lesson Plan:

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

<u>von Oech's Artist Palette</u>

Adapt - In what different contexts can you put your concept?

Imagine - What unusual "what-if" questions can you make up involving your idea? How "far out" can you go?

Reverse - Look at your concept backwards. How does it look upside down? Or inside out?

Connect - What can you combine with your concept? How does your concept fit in with the rest of your knowledge?

Compare - Make a metaphor for your concept. What similarities does it share with …?

Eliminate - What rules can you break? What's obsolete? What's taboo? What's no longer necessary?

Parody - Make fun of your concept. How silly can you be? How outrageous? What jokes can you think up involving your concept?

Incubate - What ideas are you working on for which it would pay you to pause a little bit?

Movement Assessment

von Oech's Artist Palette

Adapt - In what different contexts can you put your concept?

Imagine - What unusual "what-if" questions can you make up involving your idea? How "far out" can you go?

Reverse - Look at your concept backwards. How does it look upside down? Or inside out?

Connect - What can you combine with your concept? How does your concept fit in with the rest of your knowledge?

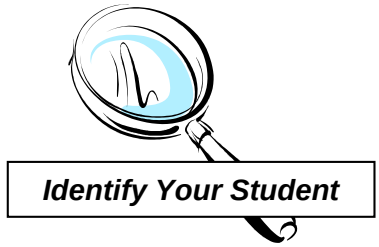
Compare - Make a metaphor for your concept. What similarities does it share with …?

Eliminate - What rules can you break? What's obsolete? What's taboo? What's no longer necessary?

Parody - Make fun of your concept. How silly can you be? How outrageous? What jokes can you think up involving your concept?

Incubate - What ideas are you working on for which it would pay you to pause a little bit?

Creativity Worksheet



Scenario: . . . . . .

. . . . . .

Task: . . . . . .

. . . . . .

CFM Strengths: . . . . . .

. . . . . .

CFM Weaknesses: . . . . . .

. . . . . .

"Show Me The Money!" . . . . . .

. . . . . .

Lesson Plan:

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

Turn the Legs Under the Body

Turn your legs under your body to assist in guiding the skis through the turn.

What it looks like:

The legs turn more than the upper body.

Turning movements originate in the feet and legs.

The upper body is stable and quiet.

What it doesn't look like:

The shoulders, torso, or hips initiate turning of the skis.

The outside hand crosses in front of the body.

The skis pivot more than necessary for the desired turn shape.

Pivoting of the skis is uncontrolled.

Turn the Legs Under the Body

Turn your legs under your body to assist in guiding the skis through the turn.

What it looks like:

The legs turn more than the upper body.

Turning movements originate in the feet and legs.

The upper body is stable and quiet.

What it doesn't look like:

The shoulders, torso, or hips initiate turning of the skis.

The outside hand crosses in front of the body.

The skis pivot more than necessary for the desired turn shape.

Pivoting of the skis is uncontrolled.

Discipline the Upper Body

Direct your upper body and swing the pole to flow with the skis through turns.

What it looks like:

The body is relaxed yet stable.

Vision is forward and the eyes look toward the intended direction of travel.

The hands are forward.

The inside hand, shoulder, and hip lead through a turn.

The shoulders are forward of the hips.

The pole swings smoothly in the intended direction of travel.

What it doesn't look like:

Vision is down or not in the desired direction of travel

Pole-swing is late, non-existent, or erratic.

The body does not flow down the hill but continuously moves rearwards or "clings" to the hill and the previous turn.

The hands are low or behind the shoulders.

Discipline the Upper Body

Direct your upper body and swing the pole to flow with the skis through turns.

What it looks like:

The body is relaxed yet stable.

Vision is forward and the eyes look toward the intended direction of travel.

The hands are forward.

The inside hand, shoulder, and hip lead through a turn.

The shoulders are forward of the hips.

The pole swings smoothly in the intended direction of travel.

What it doesn't look like:

Vision is down or not in the desired direction of travel

Pole-swing is late, non-existent, or erratic.

The body does not flow down the hill but continuously moves rearwards or "clings" to the hill and the previous turn.

The hands are low or behind the shoulders.

Balance on the Whole Foot

Flex and extend the ankles, knees, hips, and spine to balance over the whole foot as you flow with terrain and control pressure on the skis.

What it looks like:

The outside ski bends from the middle.

The shins maintain contact with both boot tongues.

The body moves continuously with the skis.

The skis maintain contact with the snow as they flow over the terrain.

All of the joints work together evenly

The body is relaxed over the skis.

What it doesn't look like:

The knees and hips flex without ankle flex.

The hips are continuously behind the feet.

The ankles are over flexed with the body's mass continuously in front of the feet.

The legs are always flexed or always extended with no shortening and lengthening of the legs during the turn.

Extension is primarily vertical, leading to late edge engagement.

The body is tense and rigid.

Balance on the Whole Foot

Flex and extend the ankles, knees, hips, and spine to balance over the whole foot as you flow with terrain and control pressure on the skis.

What it looks like:

The outside ski bends from the middle.

The shins maintain contact with both boot tongues.

The body moves continuously with the skis.

The skis maintain contact with the snow as they flow over the terrain.

All of the joints work together evenly

The body is relaxed over the skis.

What it doesn't look like:

The knees and hips flex without ankle flex.

The hips are continuously behind the feet.

The ankles are over flexed with the body's mass continuously in front of the feet.

The legs are always flexed or always extended with no shortening and lengthening of the legs during the turn.

Extension is primarily vertical, leading to late edge engagement.

The body is tense and rigid.

Balance on the Outside Ski

Direct your balance to the outside ski in the turn.

What it looks like:

The outside ski bends more than the inside ski.

The shoulders stay level to the horizon or they become more level through the turn.

The inside half of the body leads the outside half through the turn.

The inside leg is flexed more than the outside leg in a turn.

What it doesn't look like:

The inside ski bends as much or more than the outside ski in a turn.

The inside hand is continuously lower than the outside hand in a turn.

The inside hand is back.

The outside ski runs straighter than the inside ski, i.e., the outside ski does not "come around."

The shoulders are always tipped toward the inside of the turn and never level out relative to the horizon.

Balance on the Outside Ski

Direct your balance to the outside ski in the turn.

What it looks like:

The outside ski bends more than the inside ski.

The shoulders stay level to the horizon or they become more level through the turn.

The inside half of the body leads the outside half through the turn.

The inside leg is flexed more than the outside leg in a turn.

What it doesn't look like:

The inside ski bends as much or more than the outside ski in a turn.

The inside hand is continuously lower than the outside hand in a turn.

The inside hand is back.

The outside ski runs straighter than the inside ski, i.e., the outside ski does not "come around."

The shoulders are always tipped toward the inside of the turn and never level out relative to the horizon.

Release and Engage the Edges with the Legs

Use diagonal (forward and lateral) movements of the feet, legs, and hips to release and engage the edges of the skis. These movements are smooth and coordinated.

What it looks like:

The skis tip on edge early in a turn.

The shins contact both boot shafts forward and laterally.

The ski edges are released and engaged with one smooth movement.

The ski lead change occurs before the fall line.

What it doesn't look like:

The upper body tips to engage the edges.

Edging comes primarily from the knee without involving the whole leg.

Edge release occurs with exaggerated vertical movement instead of forward and lateral movement.

Edge release always occurs with a lifting of the downhill ski.

The legs are always flexed or always extended with no shortening or lengthening of the legs during turns.

Release and Engage the Edges with the Legs

Use diagonal (forward and lateral) movements of the feet, legs, and hips to release and engage the edges of the skis. These movements are smooth and coordinated.

What it looks like:

The skis tip on edge early in a turn.

The shins contact both boot shafts forward and laterally.

The ski edges are released and engaged with one smooth movement.

The ski lead change occurs before the fall line.

What it doesn't look like:

The upper body tips to engage the edges.

Edging comes primarily from the knee without involving the whole leg.

Edge release occurs with exaggerated vertical movement instead of forward and lateral movement.

Edge release always occurs with a lifting of the downhill ski.

The legs are always flexed or always extended with no shortening or lengthening of the legs during turns.