



Professional Ski Instructors of America

Cross Country Skiing Technical Skills Performance Guide

Level I, Level II, Level III

INTRODUCTION

The PSIA Cross Country (XC) Skiing Skills Performance Guide (PG) is a resource that supports the PSIA National Standards, serving as the connection between the National Standards and certification training and assessment. The performance guide is designed to maintain transparency and assure consistency of all certification standards levels. It exists as a key resource for both instructors and evaluators to reference when training and assessing the skill sets necessary for a certified snowsports professional.

Format

The Performance Guide enhances the details of the Assessment Criteria (AC) for each Learning Outcome (LO) in Professionalism and Self-Management, and People, Teaching, and Technical Skills at each level of certification. Assessment Criteria specify performance details, and to what level the Learning Outcomes have been met. The PG describes the successful and unsuccessful Performance Contributors used to measure and assess an instructor's ability to satisfy the ACs and LO. The Performance Contributors provide details of objective measurements for each AC. In addition, the PG presents assessment activity (AA) descriptions and examples of assessment activities utilized during the assessment process.

Use

Available to all PSIA-AASI members, the PG is a tool for training and certification assessments, to guide clear and transparent feedback during certification preparation and assessment. Instructors preparing for an assessment can use the PG to understand what is expected of them to achieve the Learning Outcomes. The Performance Guide refers to and is complemented by multimedia resources, including PSIA-AASI manuals, e-Learning courses, and example assessment activity descriptions and videos. These resources are provided to aid instructors when preparing for an assessment.

Assessment Form

Certification assessments use the same assessment form which directly refers to the National Standards and Performance Guide. Competence is determined by how well an instructor accomplishes the Learning Outcomes as described by the ACs. Each AC is measured on a 6-point scale. The score represents an instructor's ability to demonstrate the essential elements, described as successful performance contributors, of the AC. Instructors in an assessment must score the essential elements regularly and at a satisfactory level across all ACs to achieve the LO.

Living and Evolving Document

Performance Guides are living and evolving documents which are continually improved as feedback and suggestions are received throughout the assessment process. The PG will additionally evolve as qualifications and competencies change in a dynamic snowsports learning environment.

Learning Outcome: A Level I instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique at the beginner skill level in beginner and some intermediate terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at beginner classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Manage ski and pole push to create forward movement. VIDEO LINKS: Classic/Skate	
Successful Performance Contributors	Unsuccessful Performance Contributors
Flexes and extends the ankles, knees, hips to create forward movement from the lower body.	Skis with rigid or straight ankles, knees or hips.
Flexes and extends in the core, shoulders, and elbows to create forward movement from the upper body.	Skis with rigid/straight shoulder, elbow or core.
Coordinates arm swing with leg swing to create rhythm and continuous forward motion.	Skis with discontinuous forward motion.
Generates forward movement from both upper and lower body push-off.	Shows noncontinuous forward motion with uncoordinated upper and lower body movements.
<i>Classic</i> - Initiates deliberate flexion and extension downward to engage kick pocket and create a platform to push off.	<i>Classic</i> - Pushes off ski backwards and slips.
<i>Skate</i> - Flexes and extends downward and laterally to create a platform (edge of ski) to push off.	<i>Skate</i> - Extends leg back and does not generate forward movement.

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level I instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique at the beginner skill level in beginner and some intermediate terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at beginner classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Control the center of mass (CM) over the base of support (fore/aft and side to side). VIDEO LINKS: Classic/Skate	
Successful Performance Contributors	Unsuccessful Performance Contributors
Moves CM to new ski (BOS): extends the push-off leg seen as it briefly leaves the snow.	Keeps weight on one ski so that transfers less than full weight to the other ski (push off ski never leaves the snow)
	Falls back and forth to each ski.
Lands on the new ski with flexed ankle, knee, hip.	Lands on the new ski with a vertical shin or foot in front of knee.
Coordinates flexion and extension in the arms and lower body.	Shows inconsistent rhythm and forward motion
Maintains an Athletic Body Position (video) : Neutral back, relaxed shoulders, flexed ankles, knees, hips, CM over feet.	Skis with: *rigid or straight ankles, weight on heels. *Rigid or straight in knees. *Stiff shoulder joint or raised toward ears (creating little mobility to swing arms freely).
Skis with a consistent slow to moderate tempo and intensity.	Always skis at faster tempo which masks issues with weight transfer to each ski.
<i>Classic</i> - Transfers weight to new ski just before the moment feet pass or later	<i>Classic</i> - Transfers weight to new ski before feet pass, when feet are far apart (front to back).

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level I instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique at the beginner skill level in beginner and some intermediate terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at beginner classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Glide on one ski. VIDEO LINKS: Classic/Skate	
Successful Performance Contributors	Unsuccessful Performance Contributors
Balances and glides on each ski with ankle flexion and CM moving over the BOS.	Balances and glides with straight ankle.
	CM is elsewhere than over BOS.
Increases follow through of arms and pole release as glide increases	Follow through with arms and poles remains constant as glide increases.
Coordinates arms and leg recovery movements in a rhythmic fashion resulting in forward motion	Recovers arms and legs in an uncoordinated and/or non-rhythmic manner slowing forward momentum.

Control speed and change direction on downhills.
Successful Performance Contributors
Controls momentum, changes direction, and comes to complete stop using rotation, edging, and pressure control.
Upper body rotation is less than lower body rotation when changing direction

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level I instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique at the beginner skill level in beginner and some intermediate terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at beginner classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Show versatility in beginner terrain.

Successful Performance Contributor

Applies duration, intensity, rate, timing (DIRT) to XC fundamentals to maintain forward movement.

Continuously ski in beginner and some intermediate terrain for up to 15 minutes.

Successful Performance Contributor

Selects a pace that can be maintained 15 minutes.

Assessment Activities

The above assessment criteria may be demonstrated and assessed while free skiing at any time throughout an assessment on beginner terrain including beginner trails with turns, uphill and downhill.

Learning Outcome: A Level I instructor uses current PSIA cross country resources to identify and describe a skier’s performance at the beginner skier level.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Accurately identify and describe personal and/or an observed skier performance, using body position and body movements of one XC skiing skill.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Identifies one observable XC skiing skill.	Cannot specifically identify at least one observed XC skiing skill.
Describes observed body position referencing applicable joints and movements.	Unable to limit description of observed skiing to one XC skiing skill.
Identifies and accurately describes at least one body movement using terms such as flexion/extension and rotation.	Descriptions of observed body position and movements are inaccurate.
Distinguishes between causes and symptoms.	Uses vague language in descriptions. Example: “some ankle movement was observed.”
Prioritizes the most important movement(s).	
Use specific and technically accurate language. <i>Example:</i> “the right ankle is flexed more than the left ankle.”	

Accurately describe ideal skier performance using body position and body movements of one XC skiing skill.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Describes using accurate body position and movement terms to achieve selected XC skiing skill. <i>Example:</i> “ankle, knee, hip, and shoulder are in alignment while standing on one ski.”	Inaccurately describes anatomical position and biomechanical movements to achieve one isolated XC skiing skill. <i>Example:</i> “knee is directly over the ankle of the gliding ski, while the hips and shoulders remains between the skis.”
Identifies a single XC skiing skill.	Uses judgmental language to describe skiing performance.
Uses specific and technically accurate language to describe skier performance.	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level I instructor uses current PSIA cross country resources to identify and describe a skier’s performance at the beginner skier level.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Convey understanding by changing personal skiing performance based on feedback.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Demonstrates changes in personal body position and movements during at least one XC Skiing Skills based on internal and/or external feedback.	Personal skiing performance does not change when suggestions regarding body position and/or body movements are provided.

Identify and reference information from current PSIA resources relative to skier performance and desired outcome.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Uses current terms from PSIA educational material to describe XC skiing skills, anatomical body position, and kinematic movements.	Uses inaccurate vocabulary and is not familiar with terms used in current PSIA educational material.
References at least one relevant resource in verbal or written descriptions of personal and/or observed skiing.	Can not reference at least one relevant resource specific to XC skiing technique or teaching.
Explains the essential differences between classic and skate skiing equipment.	Can not identify the difference between classic and skate skiing equipment.

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level I instructor accurately describes cause-and-effect relationships between body and ski performance and provides a relevant prescription for change for beginner skiers.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Describe a skier’s performance in body position and body movements in one XC skill.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Identifies and isolates the skill being described.	Mixes skills in description and/or is unable to limit the description to a single skill.
Describes the body position.	Cannot be specific as to what skill is being described.
Identifies at least one body movement and prioritizes most important movement.	Description is inaccurate.
Uses specific and value neutral (non judgmental) language. <i>Example:</i> “CM over feet (BoS)” as opposed to “good balance.”	Uses judgmental language in description. <i>Example:</i> “balance is not good.”

Describe the cause and effect relationship between a skier’s body position and body movements with the ski’s performance in one XC skill.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Maintains the ability to stay within a single skill.	Mixes fundamentals or fluctuates between fundamentals resulting in an unsubstantiated cause and effect.
Describes the direct connection of how the body position and body movements are causing the ski to perform referencing the described skill.	The cause and effect connection between the body movement and ski performance is unclear or vague.
Distinguishes between cause(s) and symptom(s).	The body position and/or body movement described does not actually cause the effect described in the chosen XC Skill.
Uses specific language. <i>Example:</i> “CM is behind ball of feet causing ski to have insufficient weight and force for kick. Ski slips.”	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, on-snow and off-snow activities.

Learning Outcome: A Level I instructor accurately describes cause-and-effect relationships between body and ski performance and provides a relevant prescription for change for beginner skiers.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Provide a relevant prescription for change in skier’s body position and body movements in one XC skill to create a change in desired outcome at the beginner level.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Describes a more effective body performance and ski performance noting body position, body movement in one skill.	Description of the more effective body position and body movements is inaccurate, vague or unclear.
Prescribes at least one activity to support (develop) the more effective performance.	Prescribes an activity that does not support a change in body movements that would lead to the desired outcome in ski performance.
Chooses the most important (perhaps biggest) movement pattern and prescribes one change that will benefit the student most.	Unable to stay within a single XC Skill.
Incorporates a new movement pattern rather than “fixing” something that is wrong.	

Observe and describe how equipment choices affect performance and safety for beginner skiers.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Understands equipment application and how to use it appropriately.	Describes pole’s length inaccurately.
Understands pole length. Can articulate how too short or too long causes a specific problem.	Overlooks equipment issue that cause skier performance issues or safety issues during a certain activity.
Understands normal ski maintenance and how lack thereof can cause a specific problem. Including: icing on no-wax skis and sticky glide on skate skis.	
Understands rudimentary ski flex. Can articulate how too stiff or too soft causes a specific problem.	
Understands how boot sizing can affect performance.	
Can relate equipment choices to safety and performance for beginner skiers. <i>Examples:</i> Icing on no wax skis or bindings not closed properly could release and send skier face first downhill. Letting young children use poles can lead to stabbing each other in the eye. Using pole straps with thumb in when leaving groomed trail in powder could lead to a thumb dislocation in deep powder while going downhill.	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, on-snow and off-snow activities.

Learning Outcome: A Level II instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique in the intermediate skill level in intermediate and some advanced terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at intermediate classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Manage ski and pole push to increase speed.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Flexes and extends ankles, knees and hips actively to increase speed from lower body.	
Arms are flexed at elbow up to 90 degrees at pole plant with elbow in front of hips prior to pole plant.	
Flexes core (compresses) and simultaneously extends shoulder and elbow to create pole push and increase speed from the upper body.	Core (abdominal muscles) is not activated during push-off; indicated by no flexion of the core or uncontrolled excessive flexion while pushing on poles. Sometimes seen as hinging at the hips.
Swings arms during recovery to return arms to flexed start position and to increase speed of skier.	Shoulder and Elbows are at full extension at initiation of poling.
Positions CM over base of support prior to pole plant.	
Coordinates lower body and upper body flexion and extension to increase speed.	Lower body flexion happens before or after upper body initiates pole plant
<i>Classic</i> - Swings leg actively to increase forward movement.	<i>Classic</i> - Rear foot/ski drops to snow without active swing forward.
<i>Classic</i> - Initiates lower body flexion/extension with a fast downward movement (impulse kick) which increases speed of the skier.	

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level II instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique in the intermediate skill level in intermediate and some advanced terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at intermediate classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Maintain the center of mass (CM) over the base of support (fore/aft and side to side). VIDEO LINKS: Classic/Skate	
Successful Performance Contributors	Unsuccessful Performance Contributors
Maintains an Athletic Body Position (video) : Neutral back, relaxed shoulders, flexed ankles, knees, hips, CM over feet with shin and torso angle matching.	Skis with: *rigid or straight ankles, weight on heels. *Rigid or straight in knees. *Stiff shoulder joint or raised toward ears (creating little mobility to swing arms freely).
Moves CM from ski to ski created by leg and upper body extension.	Falls back to push off ski .
Lands on new ski with flexed ankle, knee, hip seen by maintaining body position.	
Moves Torso to new ski (base of support) with hips and shoulders square (control of bending at the waist, upper-body tipping and excessive rotation/ twisting) seen by maintaining body position.	*Leans forward (hinging) from the waist (see body position). *Leans sideways (tipping) from upper body seen by a "c" shape in body position. *Twists upper body over to new ski before lower body moves to new ski
Coordinates flexion and extension in ankle, knee, hip, core and shoulder maintaining body position.	One or more of the joints are not flexing and extending causing body position to be out of alignment.
<i>Classic</i> - Transfers weight to the new ski at the moment feet pass or later.	<i>Classic</i> - Weight is transferred to new ski before feet pass
<i>Classic</i> - Coordinates arms and feet to pass nearly simultaneously.	

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level II instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique in the intermediate skill level in intermediate and some advanced terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at intermediate classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Control the duration of ski glide.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Balances and travels on each ski adjusting ankle, knee and hip flexion and extension, eversion, inversion to control CM over the base of support.	*Skier falls or transfers weight back to new ski early. *Skier lacks body position to glide longer.
Coordinates arm, leg and hip recovery movements to create continuous forward motion and rhythm.	Arms swing forward and hips stay back causing lack of forward momentum in glide.
Glides equally on each ski.	
Extends glide as a result of power application.	Ski stalls or stops.

Manage speed and change of direction on downhills.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Separates upper body rotation from lower body rotation to change direction of travel.	Initiates change of direction with upper body.
Decreases edge angle (flattens) the new inside ski before changing the direction of travel.	
Shifts weight to outside ski when changing direction.	

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level II instructor adjusts and adapts the XC Fundamentals to demonstrate specific outcomes for both classic and skate technique in the intermediate skill level in intermediate and some advanced terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals at intermediate classic and skate skill levels by adjusting tactical choices, speed, and ski performance in the following criteria:

Show versatility in intermediate terrain.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Applies DIRT to XC fundamentals to create efficiency and increase speed	
Transitions smoothly between techniques and demonstrating balance on each ski while maintaining forward momentum.	
Adjusts power application from flat terrain into uphill terrain. Has continuous movement up the hill.	Unable to maintain momentum in intermediate terrain.

Continuously ski in beginner and intermediate terrain for up to 20 minutes.
Successful Performance Contributor
Selects a pace that can be maintained 20 minutes.

Assessment Activities

The above assessment criteria may be demonstrated and assessed while free skiing at any time throughout an assessment on intermediate terrain including trails with turns, uphill and downhill.

Learning Outcome: A Level II instructor uses current PSIA XC resources to evaluate a skier’s performance, considering equipment in the intermediate skill level.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Accurately identify and describe personal and/or an observed skier performance, referencing at least two aspects of the cross-country Sports Performance Pyramid and all skills of the XC Technical Model.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Identifies two observable aspects of the Sports Performance Pyramid for each XC skiing skill within their own skiing and/or another skier.	Identifies only one aspect of the Sports Performance Pyramid for each XC skiing skill.
Describes observed aspects of the Sports Performance Pyramid accurately using terms from the XC Technical Model.	Cannot connect each of the XC skiing skills to at least two aspects of the Sports Performance Pyramid.
Use specific and technically accurate language throughout description of a skiers performance.	Unable to stay within self selected aspects of the Sports Performance Pyramid when describing skier performance.
Addresses one ‘issue’ at a time one movement pattern at a time. <i>Example:</i> “When the right ankle’s extension is initiated after the CM has already moved over the left foot, I have a tendency to not set my kick wax and my ski slips, resulting in a short glide on my left ski.”	Uses judgmental or vague language when referring to a skier’s performance. <i>Example:</i> “The right ankle flexion is bad and so I slip when I try to kick on my right side.”

Compare personal and/or an observed performance to desired outcome, referencing the XC Technical Model.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Describes observed skiing accurately using at least two aspects of the Sports Performance Pyramid and the XC skiing skills.	Only uses one aspect of the Sports Performance Pyramid when comparing observed skiing to desired outcome.
	Jumps between aspects of the Sports Performance Pyramid creating an unclear comparison.
Connects observed body movements to ski and pole outcomes. <i>Example:</i> “The skier’s right hip is not aligned over the right ankle and knee when they are gliding on the right ski during their V2. This indicates that the CM was not completely over the single-leg BoS on the right side, limiting the length of glide on that side.”	Unable to connect observed skiing to specific desired outcome. <i>Example:</i> “The skier’s right hip is not aligned over the right ankle and knee. Additionally, the ankle is not flexed far enough. The misalignment of the joints on the right side cause a bad weight transfer to the right and left ski, even though the glide can’t be effected by this horrible weight transfer.”

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level II instructor uses current PSIA XC resources to evaluate a skier’s performance, considering equipment in the intermediate skill level.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Convey understanding by changing personal skiing performance, based on comparison to desired performance and feedback.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Demonstrates changes in XC Skiing Skills within their personal skiing based on internal and/or external feedback. <i>Example:</i> A candidate makes adjustments in body movements to achieve a longer glide during classic skiing and then applies the same adjustments while skate skiing to achieve a similar outcome.	Unable to adjust body position, movements, timing, and power application after receiving direct feedback.
Demonstrates ability to alter timing of movements and amount of power applied to their push-off during free skiing.	Doesn’t maintain changes in personal skiing (across time and techniques).

Accurately recognize and use information from current PSIA-AASI resources relative to personal performance or desired outcomes.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Uses current terms from PSIA-AASI educational material to describe the connection between the Sports Performance Pyramid and XC skiing skills presented in the XC Technical Model.	Uses terms Inaccurately from current PSIA educational material.
Accurately applies the terms of timing and power in verbal and written descriptions of personal and/or observed skiing.	Overlooks how equipment influences skiing performance.
Explains how equipment (i.e., ski stiffness, pole length, wax selection, etc.) might improve current skiing performance.	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level II instructor describes cause-and-effect relationships between body and ski performance and provides relevant prescription for change for beginning and intermediate skiers.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Describe a skier’s performance using any two aspects of the sports performance pyramid and all XC Skills of the Technical Model.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Communicates specific body and ski performance relative to each XC skill. <i>Example:</i> “CM is behind the ball of the foot prior to push off. Ski is slipping when the skier tries to push off. Arms and legs pass each other at different times during push off (Athletic Body Position and Timing (from pyramid)).	Unable to stay with the selected two aspects of the sports performance pyramid and the associated skill.

Describe the cause-and-effect relationship between the skier’s performance and the skis performance using two aspects of the sports performance pyramid in all XC Skills.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Uses specific language throughout. <i>Example:</i> “The CM is behind the balls of the feet at moment of passing causing a late kick (push off). The late kick causes a timing problem with the arm swing so that push off from poling is less forceful than it could be.”	Uses general statements such as “Kick is late, and poling is mistimed.”
Clearly communicates the skill(s) being observed and remains within the skill(s) when describing the cause-and-effect relationship between body and ski performance.	Describes cause-and-effect relationships for only one or two skills.

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, on-snow and off-snow activities.

Learning Outcome: A Level II instructor describes cause-and-effect relationships between body and ski performance and provides relevant prescription for change for beginning and intermediate skiers.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Provide a relevant prescription for change using two aspects of the XC performance pyramid and all XC Skills to create a change in desired outcome through the intermediate level.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Articulates a clear understanding and description of a more effective ski and body performance.	Uses a statement instead of an activity for the prescription. <i>Example:</i> “try skiing with your hips more forward over your feet.”
Constructs activities that address the desired outcome in the skills by working on both aspects (movement patterns) of the performance pyramid simultaneously or equally, does an evolving drill that works one movement pattern at a time, then perhaps both together. <i>Example:</i> Uses a quick tempo (running) activity to achieve a desired body position with CM over BoS during all skills and a quick flex/extension during push off.	Chooses an less important aspect of the student’s skiing that is more a stylistic problem (wrist flick vs late kick).
Chooses an important aspect of the student’s skiing to change. i.e. something which is a real impediment to success of the skills and is able to explain how they prioritize their prescription for change (Late kick vs wrist flick).	Chooses an activity that does not address the aspects of the performance pyramid identified and desired outcome of the skill(s).
Has a focused actionable plan (Teaching Method).	
Understand possible problems the student may encounter with this prescription and has anticipated some solutions.	
Observe and describe how equipment and wax choices affect performance and safety for intermediate skiers.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Understands grip wax issues and how they many affect ski performance specifically.	Continuously tries to have a student perform an activity when the student’s equipment is preventing them from successful execution of the activity. <i>Example:</i> The ski does not have appropriate kick wax applied to ski uphill and the student continues to slip on uphill activities.
Understands boot/binding problems and their effects on safety (e.g. downhill) and ability to perform some tasks (e.g. balance ones).	
Understands that a student’s inability to perform an exercise or ski effectively may have an equipment cause. <i>Example:</i> In icy tracks, skis with marginal grip, student can’t do a slight uphill balance activity with no poles. This is a grip not balance problem now.	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, on-snow and off-snow activities.

Learning Outcome: A Level III instructor demonstrates mastery of the XC Fundamentals in both classic and skate technique to demonstrate specific outcomes through the advanced skill level in a wide variety of terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals through advanced classic and skate skill levels by adjusting tactical choices, power, speed, and ski performance in the following criteria:

Control the power of the ski and pole push to optimize speed.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Flexes and then extends ankles, knees, hips simultaneously to optimize speed of skier.	
Swings arms to guide tempo and intensity corresponding to intended speed.	
Drops body down onto poles by flexing core, hips, knees and ankles to initiate the pole plant.	Lacks ankle flex causing while core, hips and knee flex causing CM to drift back.
Maintains core in isometric flexion while elbow and shoulder extend to create pole push and optimal speed.	
Positions CM over or in front of base of support prior to pole plant.	
Coordinates lower body and upper body flexion and extension maintaining body position.	
Generates power through coordinated and explosive flexion and extension of upper and lower body	
Arms are flexed at the elbow approximately 90 deg angle and shoulders are flexed (arm pit angle) up to 90 degree angle depending on terrain.	Elbow joint is consistently greater than 90 degrees.
<i>Classic</i> - Swings leg actively forward (leg drive) corresponding to intended speed.	

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level III instructor demonstrates mastery of the XC Fundamentals in both classic and skate technique to demonstrate specific outcomes through the advanced skill level in a wide variety of terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals through advanced classic and skate skill levels by adjusting tactical choices, power, speed, and ski performance in the following criteria:

Optimize the center of mass (CM) in relation to the base of support (fore/aft and side to side).	
Successful Performance Contributors	Unsuccessful Performance Contributors
Maintains a neutral back, relaxed shoulders and CM over or in front of base of support. Able to adjust and maintain body position as speed and terrain changes.	Skis with: *Back either arched or overly rounded (bent at waist). *Shoulders are rigid and stiff - seen by lack of ability to swing arms freely. *CM over or behind heels.
Lands on new ski with flexing ankle, knee and hip while maintaining CM over or in front of BoS.	
Entire torso moves to new ski together seen by hips and shoulders staying square.	*Leans forward (hinging) from the waist (see body position). *Leans sideways (tipping) from upper body seen by a "c" shape in body position. *Twists upper body excessively over to new ski before lower body moves to new ski.
Coordinates efficient flexion and extension in activated joints during all techniques when skiing a wide variety of terrain.	Flexing and extending movements are not coordinated seen by inability to maintain body position (see above).
<i>Classic</i> - Transfers weight to the new ski after the feet pass.	<i>Classic</i> - Weight is transferred to new ski at or before feet pass.

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level III instructor demonstrates mastery of the XC Fundamentals in both classic and skate technique to demonstrate specific outcomes through the advanced skill level in a wide variety of terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals through advanced classic and skate skill levels by adjusting tactical choices, power, speed, and ski performance in the following criteria:

Control optimal duration of glide.
Successful Performance Contributors
Balances and travels on each ski showing a distinct relaxation phase corresponding to intended speed.
CM moves smoothly in a forward direction.
Coordinates arm, leg and hip recovery movements (arm swing, leg swing) to optimize intended speed.
Moves CM in front of BoS for a brief period of time prior to the push off phase.
Maintains momentum with knee drive to optimize application of power.

Optimize speed and change of direction on downhills.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Rotates legs more than upper body to change the direction of travel.	
Changes edges simultaneously before changing direction of travel.	
Adjusts edge angles progressively.	
Manage pressure of ski to snow interaction.	
Adjusts weight from ski to ski when changing direction.	
	Lifts inside ski off snow to enable turn.

Assessment Activities

This link takes you to video examples of Level I tasks that may be performed by candidates to demonstrate their ability to meet the assessment criterion described above.

Learning Outcome: A Level III instructor demonstrates mastery of the XC Fundamentals in both classic and skate technique to demonstrate specific outcomes through the advanced skill level in a wide variety of terrain.

LO is assessed upon the instructor's ability to demonstrate the cross country fundamentals through advanced classic and skate skill levels by adjusting tactical choices, power, speed, and ski performance in the following criteria:

Demonstrate versatility in a wide variety of terrain.
Successful Performance Contributor
Applies DIRT to XC fundamentals to optimize speed to match terrain and desired outcome.
Adjusts power as the hill changes slope.
Varies speeds in a variety of terrain while maintaining body position.
Able to crest the hill and transition into using less power as the hill changes slope.
Continuously ski in a wide variety of terrain for up to 30 minutes.
Successful Performance Contributor
Selects a pace that can be maintained 30 minutes.

Assessment Activities

The above assessment criteria may be demonstrated and assessed while free skiing at any time throughout an assessment on intermediate terrain including trails with turns, uphill and downhill.

Learning Outcome: A Level III instructor utilizes current PSIA-AASI resources to evaluate a skier’s performance, considering terrain, tactics, equipment, and wax choices at all skill levels.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Accurately describe personal and an observed skier performance using the XC Technical Model, accounting for terrain and tactical considerations.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Connects how changes in power, timing, movements, and body position influence the performance of the ski in all XC Skiing Skills.	Cannot connect all aspects of the Sports Performance Pyramid to each of the XC Skiing Skills and the blending of the skills together.
	Cause and effect relationship between changes in aspects of the Sports Performance Pyramid are not expressed.
Accounts for changes in terrain and/or snow conditions when describing a skier’s performance observed. <i>Example:</i> “As the hill gets steeper, the skier flexes their ankles more while maintaining the speed of the push-off, resulting in a larger impulse for each push-off. This increased power is needed to maintain momentum on the steep hiller so that glide can be maintained and weight transfer will continue to occur.”	Terrain, snow conditions, and equipment selection are not accounted for in describing the skier’s performance.

Compare and analyze personal performance with desired skier performance, describing tactics and the XC Technical Model.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Describes observations of current personal skiing using accurate and specific language.	Describes the blending of XC Skiing Skills inaccurately or incompletely.
Identifies how observations have blended relationships.	Uses vague and judgmental language when describing a skiers performance.
Connects observed body movements to ski and pole outcomes. <i>Example:</i> “When gliding on the right ski my ankle has limited flexion and my foot is slightly inverted. This body position results in my CM being behind my feet and my sliding on the inside edge of the ski. The combination of these two observations might be the cause to the gliding duration on my right ski being shorter than the gliding duration on my left ski and my right hip not being in alignment with my right ankle and knee.”	Jumps between aspects of the Sports Performance Pyramid and XC Skiing Skills creating an unclear comparison.

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level III instructor utilizes current PSIA-AASI resources to evaluate a skier’s performance, considering terrain, tactics, equipment, and wax choices at all skill levels.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Convey understanding by changing personal skiing performance based on comparison to desired performance and feedback in the advanced level.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Demonstrates changes in XC Skiing Skills within their personal skiing based on internal and/or external feedback. <i>Example:</i> A candidate makes adjustments in body movements to achieve a longer glide during classic skiing and then applies the same adjustments while skate skiing to achieve a similar outcome.	Unable to adjust personal skiing based on feedback.
	Doesn’t maintain changes in personal skiing (across time and techniques). <i>Example:</i> Adjustments made during classic skiing to increase glide length are not maintained during skate skiing.
Demonstrates an understanding how unique drills and on-snow maneuvers apply to desired ski performance. <i>Example:</i> When request to perform flat spins on a gradual downhill, demonstrates changes in achieving a flat ski and/or explains why they were successful or unsuccessful.	Unable to connect unique drills and/or maneuvers to XC Fundamentals.
Demonstrates ability to alter timing of movements and amount of power applied to their push-off during free skiing.	During free skiing, adjustments to timing and power application are not made to match changes in terrain, demonstrate accelerations, or overcome changes in snow conditions.

Assessment Activities

The above assessment criterion may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level III instructor utilizes current PSIA-AASI resources to evaluate a skier’s performance, considering terrain, tactics, equipment, and wax choices at all skill levels.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Accurately recognize, utilize, and compare information from PSIA and related resources relative to personal performance or desired performance.	
Successful Performance Contributors	Unsuccessful Performance Contributors
References relevant material from outside sources (e.g. other discipline PSIA-AASI technical manuals, US Ski & Snowboard educational material, kinesiology textbooks or research articles, etc.) when describing and analyzing observed skiing.	Inaccurately uses terms from current PSIA educational material.
Makes gear selection and recommendations that match desired skiing performance and outcome in all conditions (i.e., skis flex, binding placement, base grind, wax selection, etc.).	Cannot accurately connect outside material to current PSIA educational resources.
	Does not consider how equipment influences skiing performance.
	Lacks knowledge of outside sources.

Assessment Activities

The above assessment criterion may be demonstrated and assessed in e-Learning courses, interviews and discussions during an assessment.

Learning Outcome: A Level III instructor accurately describes cause-and-effect relationships and provides relevant prescription for change for skiers at all skill levels.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Objectively describe a skier’s performance using any skill and all aspects of the XC Technical Model.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Uses all aspects of the performance pyramid to identify, isolate and describe body performance and ski performance relative to each skill. <i>Example:</i> “CM is behind the ball of the foot (athletic body position) prior to push off. Ski is slipping when the skier tries to push off. Arms and legs pass each other at different times (timing) during push off”. Leg power is lacking on uphills. Flexion and extension is minimal during push off. Glide appears compromised.	Describes a body performance relating to ski performance incorrectly.
Describes differences observed in body and ski performance in different terrain and/or different skiing cycles (push off, weight transfer, glide).	Describes a body performance and ski performance for only one or two skills.
Uses language that is easily understandable and relatable.	Uses language that is hard to understand or unrelatable. <i>Example:</i> “The skiers arms move like chicken wings.”
Describe cause-and-effect relationship between the skier’s performance and ski performance using any and all aspects of the XC Technical Model.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Describes the cause-and-effect relationship with body performance and ski performance in detail when given any aspect of the technical model or ski/skier performance. <i>Example:</i> “The CM is behind the balls of the feet at moment of passing causing a late kick (push off). The late kick causes a timing problem with the arm swing so that push off from poling is less forceful than it could be” (or causes skis to slip, or skis to slap, or to set down early, etc.).	Strays into other cause-and-effect relationships inconsistent with the theme/ point they are describing the cause-and-effect relationship.
Describes cause-and-effect relationships from either direction, ski performance and skier performance (body performance). Describes ski performance and how aspects of body performance relate to it. Describe aspects of body performance and how it affects of ski performance.	Jumps around randomly using the XC technical model terms when describing cause-and-effect relationships resulting in an unclear description of cause-and-effect.
Clearly communicates the skill(s) being observed and remains within the skill(s) when describing the cause-and-effect relationship between body and ski performance. (Stays on point about the cause-and-effect relationships)	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, on-snow and off-snow activities.

Learning Outcome: A Level III instructor accurately describes cause-and-effect relationships and provides relevant prescription for change for skiers at all skill levels.

LO is assessed upon the instructor’s ability to consistently demonstrate the following criteria:

Provide a relevant prescription for change utilizing the XC Technical Model to create a desired change in outcome.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Articulates a clear description of a more effective performance noting significant differences in body and ski performance in all skills/fundamentals.	Describes what is thought to be a more effective performance, but is actually less effective.
Describe how changes in one skill will facilitate changes in another skill(s) and how the blended skills create specific outcomes in performance.	Lacks the ability to discuss how outcomes of a specific skill can have an affect on the other skills and how the blended skills create specific outcomes in performance.
Constructs activities that address the desired outcome in the skills by working on all aspects of the performance pyramid. Does evolving drills that works the aspects, then perhaps several together.	Constructs activities that do not address the desired outcome.
Describes how the changes could benefit the skier’s tactics such as creating and sustaining speed, more efficient in an endurance ski, adaptable to different snow conditions.	Constructs Activities that work some but not all aspects of the sports performance pyramid that addresses the desired outcome.
Evaluate equipment based cause-and-effect relationships relative to the student and their objectives in all skier ability levels.	
Successful Performance Contributors	Unsuccessful Performance Contributors
Understands how at an advanced level equipment may impact performance as it related to the technical model and fundamental. <i>Examples:</i> wax vs no-wax classic skis, racing vs touring ski, skating vs combi boot, stiff vs wimpy pole, light vs heavy pole, light vs heavy ski, non-flat bases.	Overlooks the affects of advanced level ski equipment has on a skiers desired outcomes or the affects that low level ski equipment has on an advanced level skiers desired outcome.
Understand how equipment specifics affects ski performance and skill development tactics. <i>Examples:</i> The differences between waxable ski vs a skin ski will affect tactics for climbing hill (short strides with a skin ski vs herringbone with a waxable ski). Choosing appropriate terrain to do DP on, or whether to do it at all that day. Or gliding downhill on one ski with a “grabby” skin ski. Or downhill turning choices with a grabby skin ski. Or practicing telemark and or parallel with a racing ‘double cambered’ ski versus a soft turnable touring style ski. Or downhill control on an icy ruddy day with racing classic skis and boots versus skating skis and good skate boots.	

Assessment Activities

The above assessment criteria may be demonstrated and assessed in e-Learning courses, on-snow and off-snow activities.